Hour Angle End

| Hour Angle End | Declination | Seeing | Ptg. Mag. | REMARKS |
|---|---|---|---|---|
| | | | | |

David Dunlap Observatory
74" logbook
Vol 4
Plate Nos 2302 - 3100
Aug 1937 - May 1938

Date Monday August 16-17, 1937 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | set | set | | | | |
| 2302 | HD 162555 | 17 46.5 | +29 21 | I-12½ | Astra II | 010 | 27.8 | 19 58 | 20 24 | 3 | 0° 11E +2 |
| 2303 | " 165281 | 18 00.1 | +30 24 | " | " | " | 28.1 | 20 26 | 21 16 | 4 | 0 3W + |
| 2304 | " 169223 | 18 18.6 | +16 38 | " | " | " | 27.9 | 21 20 | 22 10 | 1 | 1 12W + |
| 2305 | " 187160 | 19 43.4 | +44 05 | " | " | " | 27.8 | 22 15 | 23 35 | 2 | 1 13W + |
| 2306 | " 199055 | 20 49.5 | +31 15 | " | " | " | 27.7 | 23 38 | 0 38 | 3 | 1 10W + |
| 2307 | " 201078 | 21 02.3 | +30 47 | " | " | " | 27.8 | 0 41 | 1 45 | 4 | 1 3+W + |
| | 222275 | 23 34.1 | +61 35 | " | " | " | 27.9 | 2 45 | | 1 | + |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 20 24 3 | 0° 02E | +29 21 | 3-2 | 6.61 | K0 | 1, 1, 1 | Aug. 16. 10 |
| 21 16 4 | 0. 36 W | +30 24 | 2 | 7.08 | F5 | 1, 1, 1 | |
| 22 10 1 | 1 12 W | +16 39 | 2-1 | 7.38 | K0 | 1, 1, 1 | Light clouds. |
| 23 15 2 | 1 13 W | +44 12 | 2 | 7.59 | G0 | 1, 1, 1 | Clouds last 10 minutes. |
| 0 38 3 | 1 10 W | +31 23 | 2+1 | 7.04 | A5 | 1, 1, 1 | |
| 1 16 4 | 1. 34 W | +30 56 | 2-1 | 6.28 | F5 | 1, 1, 1 | Clouds; filling in rapidly at 1.00 |
| | | +61 47 | 2 | 6.78 | A2 | 1, 1, | Breaking about 2.15. Very cloudy during exposure filling in solid by 3.30 so closed up. |

| | ΔθS.T.A. | ΔθS.W. | ΔθM.W |
|---|---|---|---|
| | +4h 00m 48.8s | -06.1s | -22.0s |

| | H.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|
| Aug. 17 14 | -42.2s | -17.4s | -02.4s | -39.9s | +0.1m |
| | | Reset | | | Reset. |

**Date** Tuesday Aug 17-18/37 Y-L **Julian Day**

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2308 | HD 198626 | 20 46.5 | 30 32 | I-12½ | Agfa II | 010 | +25.3 | 11 05 | 11 55 | 2 0 35 W |
| 2309 | HD 209469 | 21 58.6 | 42 20 | " | " | " | +25.2 | 11 58 | 12 58 | 3 0 14 W |
| 2310 | " 218538 | 23 03.7 | 28 39 | " | " | " | +25.0 | 1 03 | 2 39 | 4 1 00 W |
| 2311 | " 10588 | 01 38.2 | 31 43 | " | " | " | +25.1 | 2 44 | 3 40 | 1 0 34 E |
| 2312 | " 10363 | 01 36.1 | 43 08 | " | " | " | +24.9 | 3 43 | 4 45 | 2 0 34 W |

Wed Aug 18 Hd Temp=23.0

Changed to I-25- set Tilt 23.25- focus 23.30

(I 12 focus was: Tilt 19.5 focus 26.15)

| Ending Time E.S.T. | Hr | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 11 55 | 2 | 0 55 W | +30 42 | 2 | 6.81 | $A_2$ | 1-1-1 | |
| 12 58 | 3 | 0 24 W | +42 31 | 2-1 | 7.04 | B9 | 1-1-1 | |
| 2 39 | 4 | 1 00 W | +28 49 | 1 | 7.56 | $A_2$ | 1-1-1 | |
| 3 40 | 1 | 0 34 E | +31 53 | 1 | 7.20 | G5 | 1-1-1 | |
| 4 45 | 2 | 0 34 W | +43 20 | 1 | 7.03 | $A_0$ | 1-1-1 | |

| | Δθ H.T.A. | Δθ S.T.A. | Δθ S. W. | Watch Δθ M.T. | Watch Δθ S.T. |
|---|---|---|---|---|---|
| Aug. 18 10 | -42.6s | -17.7s | -01.3s | -41.3s | -0.1m |

23.30

(mm 26.15)

Date Wed Aug 18-19/37 ~~Hd~~-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Ind |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2313 | HD142926 | 15 52.2 | 42 51 | I-25" | Astra II | 010 | 25.5 | 8 11 | 9 15 | 3 | — |
| 2314 | HD 174177 | 18 44.2 | 46 12 | " | " | " | 25.5 | 9.24 | 10 34 | 4 | W 1h 18m |
| 2315 | HD 199311 | 20 51.3 | 45 51 | " | " | " | 25.4 | 10 40 | 12 26 | 1 | W 1h 04 |
| ~~γ Cas~~ | | 00 50.7 | 60 11 | " | Powers | " | 25.5 | 12 46 | 12 51 | 1 | |
| 2316 | γ Cas HD 5394 | | | | | | | 12 53 | 12 59 | 1 | |
| | | | | | | | | 1 01 | 1 09 | 1 | E 2h 13 |
| 2317 | HD 219634 | 23 12.2 | 61 25 | " | Astra II | 010 | 25.5 | 1 26 | 2 36 | 2 | W 0h 53m |

Thurs Aug 19/37 Hd

Changed to I-12 set Tilt 19.5" focus 26.15

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2317F | Focus | | | I-12 | Astra II | 010 | 22.0 | | | 3 | |

Thursday – Aug 19-20, M MR

Severe thunder showers in afternoon and early evening
Clouds covered most of sky during entire night

| Ending Time E.S.T. | | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 9 15 | 3 | — | 42 45 | 0 | 5.6 | $B_8$ | 3,3,3 | Cover dec setting button failing - losing time on changes. |
| 10 34 | 4 | W $1^h 18^m$ | 46 16 | 1 | 6.47 | $A_0$ | 3,3,3 | |
| 12 26 | 1 | W $1^h 04$ | 46 01 | 1 | 6.66 | $A_0$ | 3,3,3 | occasional clouds, thick at end |
| 12 51 | 1 | | | | | | 88 no filter | ret 1 |
| 12 59 | 1 | | | | | | 88 | " 5 — clouds |
| 1 09 | 1 | E $2^h 13$ | 60 22 | 1 | 2.0 | $B_{0p}$ | 88 no filter | " 9 — clouds |
| 2 36 | 2 | W $0^h 53^m$ | 61 36 | 1 | 6.44 | $B_8$ | 3,3,3 | cloudy at end |
| | | | | | | | | thick at 3.00 so closed up |
| | | | | | | | | Watch |
| | | | | | | | | M.T.A. S.T.A. S.W. M.T. S.T. |
| | | | | | | | | Aug. 19 10 -43·0 -17·8 +07·0 +18·0 +0·8 |
| | | | | | | | | Best |
| 15 | | | | | | | | |
| | 3 | Outside thro Gone | | | | | 10/7 | |
| | | | | | | | | Aug. 20 10 -43·6 -16·0 +12·0 +16·8 +0·9 |

Date..... Julian Day.....

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Friday – Aug 20-21, M-MR | | | | | | | | |
| | | | Clouds and thunder storms all night. | | | | | | | |
| | | Sat Aug 21-22 Hd RJN. | | | | | | | | |
| about 2½ visible Clouds then clearing. Tried 2 short exp (just too low) then d Herc. but clouds again. Closed. | | | | | | | | | | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

13

Date Sunday August 22-23, 1937 17-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Intl |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2318 | H.D. 158485 | 17 24.5 | +58 44 | I-12 | Ast. II | Set 0.10 | +21.0 | 19 50 | 20 35 | 4 | |
| 2319 | " 159330 | 17 27.1 | +57 57 | " | " | " | +21.0 | 20 37 | 21 37 | 1 | |
| 2320 | " 181799 | 19 36.8 | +60 46 | " | " | " | +20.9 | 21 40 | 22 45 | 2 | |
| 2321 | " 199492 | 20 52.5 | +74 16 | " | " | " | +20.9 | 22 48 | 0 15 | 3 | |
| 2322 | ~~2 37 54?~~ ~~2 35 51~~ | 21 17.8 | +60 12 ~~+60 15~~ | " | " | " | +21.0 | 0 23 | 1 26 | 4 | |
| 2323 | " 222381 | 23 35.0 | +74 43 | " | " | " | +21.1 | 1 32 | 1 57 | 1 | |
| 2324 | " 222384 | 23 35.0 | +73 25 | " | " | " | +21.0 | 2 00 | 2 30 | 2 | |
| 2325 | " 224008 | 23 50.0 | +73 51 | " | " | " | +20.9 | 2 33 | 3 17 | 3 | |
| 2326 | " 5451 | 00 51.3 | +60 33 | " | " | " | +21.1 | 3 21 | 4 | 4 | |
| 2327 | " 6130 | 00 52.4 | +60 32 | " | " | " | +21.1 | 4 25 | 4 40 | 1 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | Telescope off pier 57 Min. off to east |
| 0 | 0 56 W | * + 58 58 | 0-1 | 6.58 | A2 | 1, 1, 1 | Reset slow drives to read + 58 42 |
| 1 | 1 53 W | + 57 55 | 1 | 7.57 | K2 | 1, 1, 1 | |
| 2 3 | 1 13 W | + 60 51 | 1 | 6.99 | B9 | 1, 1, 1 | |
| 3 | 1 12 W | + 74 23 | 1-2 | 7.47 | A3 | 1, 1, 1 | Scattered light clouds to east |
| 4 | 1 54 W | + 60 23 | 2 | 7.16 | F5 | 1. 1. 1 | Scattered clouds [illegible] |
| 1 | 0 07 W | + 74 [illegible] | 1-2 | 6.10 | A2 | 1, 1, 1 | |
| 2 | 0 40 W | + 73 38 | 1-2 | 6.[illegible] | G5 | 1, 1, 1 | |
| | 1 12 W | + 74 03 | 1-2 | 6.55 | B9 | 1, 1, 1 | Light clouds |
| | 1 15 W | + 61 05 | 1-2 | 7.40 | G5 | 1, 1, 1 | |
| | 1 39 W | + 60 44 | 1-2 | 6.22 | F0 | 1, 1, 1 | Clouds at end of exp. |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Aug. 23 | 10 | -44.3 | -15.0 | +22.4 | +16$^{s}$.4 Reset | +0$^{m}$.1 |

15

Date Monday Aug 23 24 1937 Y-9-2 Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Mid |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2328 | HD 166409 | 18 05.4 | 44 06 | I-12 | Astro II | 010 | 20.1 | 8 42 | 9 28 | 1 | 1h 11m |
| 2329 | HD 180583 | 19 12.0 | 37 45 | " | " | " | 20.0 | 9 38 | 10 45 | 3 | 1h 22m |
| 2330 | HD 199098 | 20 49.8 | 44 48 | " | " | " | 20.1 | 10 51 | 11 21 | 4 | 0 11 |
| 2331 | HD 202314 | 21 09.0 | 29 29 | " | " | " | 20.3 | 11 24 | [illegible] | 1 | 0 53 |
| 2332 | HD 209813 | 22 04.3 | 44 45 | " | " | " | 20.3 | 12 24 | [illegible] | 2 | 1 25 |
| 2333 | HD 4335 | [illegible] | [illegible] | " | " | " | 20.2 | 1 40 | 2 20 | 3 | 0 x 1 |

| Evening Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | $1^h\ 12^m$ W | 44 08 | 1-2 | 706 | F5 | 1-1-1 | [Ready to start 7^40 but nose of the bathroom on head would not respond two times to 9.^s broken off. Recorded to other equatorial part and long enough to read 9 rows.] |
| | $1^h$ 22 W | 27 49 | 2-dust. | 656 | F8p | 1-1-1 | |
| | 21 W | 44 59 | 2-3 | 659 | K0 | 1-1-1 | |
| | 0 57 W | 29 40 | 2-3 | 725 | K0 | 1-1-1 | |
| | 1 25 W | 46 56 | 2-3 | 752 | K2 | 1-1-1 | Quite large clouds. |
| | 0 47 E | 44 31 | 2-3 | 5.14 | B8 | 1-1-1 | Light haze clouds. |

Broken clouds all over most of sky—NE cleared up at 3.15

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Aug. 24 | 10 | -44.3 | -14.9 | +28.1 | +15.^s0 | +0.^m2 |

Date Tuesday - Aug 24-25 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Incl |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2334 | HD. 178568 | 19 4.0 | 14 17 | I - 12 | Astra II | .010 | +25°.2 | 7 54 | 9 04 | 1 | 0 E |
| 2335 * | 194115 | 20 18.7 | 15 03 | — | — | — | +25.2 | 9 07 | 10 17 | 2 | 0 E |
| 2336 | 194211 | 20 19.3 | 15 43 | — | — | — | +25.0 | 10 20 | 11 10 | 3 | 0 43 W |
| 2337 | 194915 | 20 48.5 | 46 21 | " | " | " | +25.0 | 11 14 | 12 28 | 4 | 1 37 W |
| 2338 | 217587 | 22 56.7 | 43 39 | " | " | " | +25.5 | 12 32 | 1 52 | 1 | 1 41 W |
| 2339 | 2019 | 00 09.4 | 30 49 | " | " | " | +25.3 | 1 56 | 2 42 | 2 | 1 [illegible] W |
| 2340 | 2411 | 00 [illegible] | 17 21 | " | " | " | +25.3 | 2 45 | 3 15 | 3 | [illegible] |
| 2341 | 10773 | 01 40.3 | 43 13 | " | " | " | +25.2 | 3 19 | 4 49 | 4 | [illegible] |

| Starting Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 04 1 | 0 7 E | 14 20 | 1 | 6.72 | B9 | 1, 1, 1 | |
| 9 17 2 | 0 9 E | 15 11 | 2 | 7.09 | A0 | 1, 1, 1, | control clock stopped before my tests. Tried to find without results. Shut down 11 o'clock P.M. |
| 9 33 3 | 0 43 W | 15 51 | 1-2 | 6.68 | B9 | 1, 1-1 | Plate numbered 2337 by accident. |
| 9 47 4 | 1 23 W | 16 30 | 1-2 | 7.28 | B9 | 1-1-1 | |
| 10 1 5 | 0 41 W | 13 51 | 2-3 | 7.33 | $A_3$ | 1-1-1 | |
| 10 15 6 | 0 16 W | 31 02 | 2 | 6.78 | $B_1$ | 1-1-1 | |
| 10 28 7 | 0 26 W | 17 33 | 2-3 | 6.65 | $A_{1/2}$ | 1-1-1 | |
| 10 42 8 | 1 2 N | 13 24 | 2-3 | 7.40 | $A_0$ | 1-1-1 | |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Aug 25 | 10 | +44.3 s | -13.1 s | +32.9 s | +14.4 s | +0.1 m |

$\Delta L = 0$

Date Wed Aug 25-26, 1937 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Mid |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2342 | HD 174177 | 18 44.2 | 46 12 | I-12 | Cramer II | 010 | 26.5 | 7.40 | 8.20 | 1 | E 29m |
| 2343 | " 176131 | 18 53.7 | 46 37 | " | " | " | 26.4 | 8.23 | 9.23 | 2 | W 25m |
| 2344 | " 177829 | 19 01.2 | 43 43 | " | " | " | 26.5 | 9.28 | 10 18 | 3 | W 1h 14 |
| 2345 | " 199479 | 20 52.4 | 43 59 | " | " | " | 26.4 | 10.25 | 11.15 | 4 | W 2h 2 |
| 2346 | " 199511 | 20 52.6 | 43 02 | " | " | " | 26.5 | 11.18 | 12 08 | 1 | |
| 2347 | " 219675 | 23 12.6 | 17 45 | " | " | " | 26.5 | 12 14 | 1 04 | 2 | |
| 2348 | " 874 | 00 09.0 | 14 22 | " | " | " | 26.5 | 1 08 | 2 0[illegible] | 3 | |
| 2349 | " 9312 | 01 24.6 | 16 28 | " | " | " | 26.5 | 2 12 | 3 32 | 4 | |
| 2350 | " 15227 | 02 22.1 | 16 12 | " | " | " | 21.4 | 3 36 | 4 5[illegible] | | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | REMARKS |
|---|---|---|---|---|---|
| E 27m | 46 16 | 2 | 6.47 | $A_0$ | 1½, 1½, 1½ |
| W 26m | 46 42 | 2 | 7.14 | $A_2$ | 1½, 1½, 1½ |
| W 1h 14 | 43 49 | 2 | 6.76 | $B_7$ | 1½, 1½, 1½ |
| W 20m | 44 10 | 2 | 6.66 | $B_8$ | 1½, 1½, 1½ |
| 13 W | 43 11 | 2-3 | 6.74 | $B_9$ | 1½, 1½, 1½ |
| 0 12 E | 17 59 | 2-3 | 6.91 | $F_0$ | 1-1-1 |
| 0 03 E | 16 35 | 2-3 | 7.40 | $G_5$ | 1-1-1 |
| 0 07 W | 16 38 | 2-3 | 7.59 | $G_5$ | 1-1-1 |
| 0 21 W | 16 23 | 2 | 7.54 | $F_0$ | 1-1-1 |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Aug. 26 | 10 | −44.4s | −13.4s | +34.5s | +13.3s | +0.2m |

Date Thursday Aug 26-27, 1937 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2351 F, | | | | I-12 | Astra II | .010 | +27°0 | — | setting 75 | 2 | |
| 2351 | HD 169820 | 18 21.4 (m 26) | 14 55 (m 36) | — | — | — | — | 7 55 | setting 35 8 53 | 2 | C 32W + |
| 2352 | β Aquarii | 21 28.2 | -5 51 | — | Astra IX | .060 L | +26.9 | 8 59 | 9 07 | 1 | 2 9E - |
| 2353 | HD 179218 | 19 6.6 | +15 ~~40~~ 41 | — | Astra II | .010 | +26.8 | 9 19 | 10 29 | 3 | 1 23W - |
| 2354 | 191048 | 20 2.8 | 15 47 | — | — | — | +26.7 | 10 31 | 12 01 | 4 | 1 3W + |
| 2355 | 210090 | 22 2.8 | 17 32 | — | — | — | +26.7 | 12 03 | 1 25 | 2 | 1 23W - |
| 2356 | 3 | 00 00.0 | 44 40 | — | — | found at .008 | +26.8 | 1 30 | 2 15 | 3 | 0 16W - |
| 2357 | 10407 | 01 36.4 | 29 01 | — | — | reset .010 | +26.8 | 2 24 | 4 30 | 4 | 0 55W + |

Shots 45 s on Astro II

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| base values | | | | | 10 7 | |
| 0 32 W | +14 57 | 0 | 6.43 | B9 | 1 1 1 | |
| 2 19 E | −5. 50 | 0 | 3.07 | G0 | — | Zeiss 38 A. Ex. 30 2 setting 30 120 240 0 1 2 3 Shots 25 s Shots 120 s Scale 15 s with 38 A. |
| 1 23 W | +15 42 | 0-1 | 7.13 | B9 | 1 1 1 | One of Wyo setting [illegible] than OK. of late. |
| 1 59 W | +15 54 | 1-2 | 7.46 | B9 | 1 1 1 | light clouds in N and W |
| 1 23 W | +17 42 | 1-3 | 7.78 | Ma | 1 1 1 | |
| 0 16 W | +44 53 | 2: | 6.51 | A0 | 1 1 1 | some very light clouds. |
| 0 55 W | +29 12 | 2-clouds | 7.44 | $A_2$ | 1 1 1 | light clouds most of time |

| | Watch M.T. | S.T. |
|---|---|---|
| Aug 27 10 43.3 −13.8 +40.0 | +12.0 s | +0.1 or |

Date Fri Aug 27-28, 1937 Ad-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2358 | HD164078 | 17 54.4 | 32 41 | I-12 | Astra II | 010 | 27.2 | 7 44 | 8.24 | 1 | E 14m |
| 2359 | " 179838 | 19 09.0 | 29 03 | " | " | " | 27.3 | 8 29 | 9.19 | 2 | W 14m |
| 2360 | " 189213 | 19 53.8 | 28 36 | " | " | " | 27.2 | 9 22 | 10.22 | 3 | W 17m |
| 2361 | " 190167 | 19 58.1 | 28 14 | " | " | " | 27.2 | 10.25 | 11.15 | 4 | W 19m |
| 2362 | " 198726 | 20 47.2 | 27 52 | " | " | " | 27.1 | 11.18 | 11 40 | 1 | W 58m |
| 2363 | " 212500 | 22 19.6 | 15 48 | " | " | " | 27.1 | 11.44 | 1 06 | 2 | W 52m |

| Ending Time P.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 8.14 | W 24m | 32 40 | 1 | 6.96 | $F_5$ | 1½, 1½, 1½ | |
| 9.9 | W 14m | 29 07 | 2 | 6.93 | $A_0$ | 1½, 1½, 1½ | Failure of curvex dec setting button becoming chronic! |
| [illegible] | W 33m | 28 42 | 2 | 7.11 | $A_2$ | 1½, 1½, 1½ | |
| [illegible] | W 1h 21m | 28 21 | 2 | 6.77 | $B_9$ | 1½, 1½, 1½ | |
| [illegible] | W 58m | 28 02 | 2 | 6 var | $F_{8p}$ | 1½, 1½, 1½ | |
| [illegible] | W 52m | 15 59 | −∞ | 7.41 | $F_2$ | 1½, 1½, 1½ | Thick haze; star image gone about 12 00 |

Date Saturday August 28-29, 1937 H-M R Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Rad |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2363 F1 | Arcturus Cat | | | I-12 | E 33 | 0.10 | +26.0 | 19 40 | | 1 | |
| 2364 | HD. 159613 | 19 55.8 | +31 [illegible] | " | Astro II | " | +26.5 | 22 21 | [illegible] 06 | | |
| F | Arcturus Cat | | | " | " | " | -26.5 | | | | |
| 2365 | 199101 | 20 49.8 | +33 03 | " | " | " | +26.3 | 23 10 | 23 35 | 3 | |
| 2366 | 201196 | 21 02.9 | +15 24 | " | " | " | +26.2 | 23 38 | 0 38 | 4 | |
| 2367 | 221253 | 23 [illegible] | +58 [illegible] | " | " | " | +26.4 | 0 [illegible] | [illegible] | | |
| 2368 | 221237 | [illegible] 852 | +58 01 | " | " | " | +26.3 | 1 01 | 2 01 | 2 | |
| 2369 | 2666 | 00 26.2 | +31 38 | " | " | " | +26.2 | 2 06 | 3 36 | 3 | |
| 2370 | 10086 | 01 33.5 | +45 23 | " | " | " | +26.1 | 3 41 | 4 31 | 4 | |
| 2371 | 16220 | 02 31.1 | +32 27 | " | " | " | +26.2 | 4 35 | 5 05 | 1 | |

Holmdel ∈ Lyon – M13 with T4
MR aboard [illegible], Mean Datum
RJV central

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | Central Star Image | | | 40/20 | | | Slide 26.20, Tilt |
| | | | | | | | Changed from T 26.22 |
| | 1 19 W | +31 37 | 1 | 6.69 | $H_0$ | 1, 1, 1 | Smaller Image. Shifted from slide |
| | Central Star Image | | | | | 10/7 | |
| | 0 54 W | +33 11 | 1 | 6.75 | $K_{0_2}$ | 1, 1, 1 | |
| | 1 49 W | +15 24 | 1-2 | 7.52 | $K_0$ | 1, 1, 1 | 21°-0° |
| | 0 16 E | +59 12 | 2-3 | 4.72 | $G_3$ | 1, 1, 1 | Slide by mistake for HD 221287 |
| | 0 45 W | +58 12 | 3 | 7.05 | $F_0$ | 1, 1, 1 | |
| | 1 20 W | +31 49 | 2-3 | 7.99 | $F_5$ | 1, 1, 1 | |
| | 1 06 W | +45 35 | 2-3 | 7.44 | $G_5$ | 1, 1, 1 | |
| | 0 43 W | +32 37 | 2 | 6.71 | $F_5$ | 1, 1, 1 | |

| | | M.T.A. | S.T.A. | S.W. | Watch: M.T. | S.T. |
|---|---|---|---|---|---|---|
| Aug. 30 | 10 | -45.5 | -15.0 | +54.2 | +10.1 | 0m 0. |

Sunday Trick

Date Monday Aug 30-31 1937 4-I Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | How Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2372 | HD 165683 | 18 02.1 | 32 14 | I-12 | Astra II | 010 | 26.3 | 7 48 | 8 34 | 1 | |
| 2373 | HD 180583 | 19 12.0 | 27 45 | " | " | " | 26.2 | 8 38 | 9 18 | 2 | |
| 2374 | HD 191918 | 20 07.2 | 32.00 | " | " | " | 26.4 | 9 23 | 10 27 | 3 | |
| 2375 | HD 198626 | 20 46.5 | 30 32 | " | " | " | 26.4 | 10 32 | 11 32 | 1 | |
| 2376 | HD 210459 | 22 05.1 | 44 21 | " | " | " | 26.4 | 11 38 | 12 38 | 1 | |
| 2377 | HD 216606 | 22 44.2 | 44 13 | " | " | " | 26.3 | 12 42 | 1 04 | 2 | |
| 2378 | HD 218395 | 23 08.6 | 32 18 | " | " | " | 26.3 | 1 08 | 1 40 | 3 | |
| 2379 | HD 1824 | 00 17.6 | 28 50 | " | " | " | 26.2 | 1 44 | 2 16 | 4 | |
| 2380 | HD 11174 | 01 41.6 | 45 44 | " | " | " | 26.3 | 3 00 | 3 56 | 1 | |
| 2381 | HD 11187 | 01 30.8 | 31 10 | " | " | " | 26.2 | 4 02 | 4 49 | 2 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | 53m W | 32 14 | 2 | 6.92 | $K_0$ | 1-1-1 | |
| | 23m W | 27 49 | 3 | 6.56 | $F_{8p}$ | 1-1-1 | |
| | 36m W | 32 06 | 3 | 7.07 | $A_0$ | 1-1-1 | |
| | 1h02m W | 30 41 | 3 | 6.81 | $A_2$ | 1-1-1 | |
| | 0 50 W | 44 33 | 3 | 6.60 | 89 | 1-1-1 | |
| | 0 31 W | 44 26 | 3 | 5.62 | $A_0$ | 1-1-1 | |
| | 0 [illegible] W | 32 30 | 3 | 6.03 | $A_2$ | 1-1-1 | |
| | 0 55 W | [illegible] | 3 | [illegible] | $A_3$ | 1-1-1 | |
| | 0 31 W | 45 [illegible] | 3 | 7.74 | $F_5$ | 1-1-1 | |
| | 0 44 W | 31 21 | 3 | 7.1[illegible] | $K_0$ | 1-1-1 | |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Aug. 31 | 10 | $-45^s.9$ | $-15^s.5$ | $-11^s.3$ adv $1^m$ | $+08^s.2$ | $40^m.1$ |

Date Tues Aug 31-Sept 1, 1937 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2382 | HD163966 | 17 53.8 | 45 01 | I-12 | astra II | 0/0 | 27.5 | 7.39 | 8 45 | 3 |
| 2383 | 177429 | 19 01.2 | 43 43 | " | " | " | 27.5 | 8.48 | 9 38 | " |
| 2384 | 199479 | 20 52.4 | 43 59 | " | " | " | 27.5 | 9 42 | 10 28 | 1 |
| ~~2385~~ | ~~199547~~ 199521 | 20 52.8 ~~20 52.6~~ | ~~+43 31~~ 43 02 | " | " | " | 27.5 | 10 32 | 11 20 | 2 |
| 2386 | 205939 | 21 33.6 | 44 14 | " | " | " | 27.5 | 11 28 | 1 58 | 3 |
| ~~2387~~ | 222900 | 23 39.6 | 45 49 | " | " | " | 27.5 | 12 02 | 1 36 | |
| | 2462 | 00 23.2 | 31 53 | | | | | | | 1 |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| W 1h 11 | 45 01 | 1 | 6.81 | B9 | 1½, 1½, 1½ | Very hazy — improving slowly |
| W 53m | 43 47 | 1-2 | 6.76 | B9 | 1½, 1½, 1½ | |
| E 04m | 44 07 | 3 | 6.66 | B8 | 1½, 1½, 1½ | |
| W 48m | 43 40 | 3 | (8.07 / 6.74 | B5 / B8) | 1½, 1½, 1½ | Wrong star. Star was α = 20h 57.0, δ = +41°40 (1935) Found circle on finder chart. |
| 0 45 W | 44 26 | 3 | 6.19 | A3 | 1½, 1½, 1½ | |
| 0 13 W | 41 23 | 3 | 7.43 | A0 | 1-1-1 | |
| | | | 6.7? | [illegible] | | |

[illegible]

| | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|
| Sept. 1. 10 | -46.0 | -15.9 | -03.3 | +07s.1 | +0m.0 |

Date Thursday Sept 2, 1937 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 50μ | 30° | Mean 20 | 55 | | |
| 2388 | HD 162936 | 17 48 5 | +32 02 | I-12 | 2 tc II | 6.0 | 25.7 | 19 48 | 21 30 | 1 | |
| 2389 | 18051 | 19 57.0 | +30 57 | " | " | " | 28.6 | 21 32 | 22 17 | 2 | |
| 2390 | 199140 | 20 50.1 | +28 08 | " | " | " | 28.7 | 22 20 | 22 50 | 3 | |
| 2391 | 197837 | 20 54.6 | +31 15 | " | " | " | 28.5 | 22 53 | 00 27 | 4 | |
| 2392 | 210441 | 21 05.5 | +14 07 | " | " | " | 28.4 | 00 00 | 00 58 | | |
| 2393 | 221237 | 23 25.2 | +38 01 | " | " | " | 28.7 | 1 04 | 1 46 | 1 | |
| 2394 | 8941 | 01 23.0 | +16 34 | " | " | " | 28.5 | 2 10 | 3 06 | 3 | |
| 2395 | 1116 | 01 19.2 | +32 37 | " | " | " | 28.7 | 3 09 | 4 14 | 4 | |
| 2396 | 13178 | 03 43.1 | +44 40 | " | " | " | 28.6 | 4 15 | 4 50 | 1 | |

Thursday, Sept 2, 1937 H-MR

Threatening clouds all day. Cleared for a while at 10.30 and also looked hopeful at 1st - 3rd

Clear most of day; Seeing poor at sunset
Thin clearing.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 06 W | +32 01 | 2-1 | 7.14 | A0 | 1, 1, 1 | Clouds again. Stars last 19ST − 20[20]. Thin haze |
| | 0 44 W | +31 23 | 2 | 6.66 | B8 | 1, 1, 1 | thru. |
| | 0 25 W | +28 16 | 2 | 6.27 | B3 | 1, 1, 1 | |
| | 1 33 W | +31 23 | 2-3 | 7.15 | B9 | 1, 1, 1 | |
| | 1 17 W | +14 14 | 2-3 | 7.41 | A0 | 1, 1, 1 | |
| | 1 01 W | +58 13 | 3 | 7.06 | A0 | 1, 1 | |
| | 0 08 W | +16 11 | 3 | 7.17 | F5 | 1, 1 | |
| | 1 01 W | +32 47 | 0-1 | 7.13 | G0 | 1, 1, 1 | Sun blown up due to a large sun- |
| | 1 16 E | +44 49 | 1 | 6.35 | G0 | 1, 1, 1 | flare. |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Sept. 2 | 10 | -46·3 | -16·7 | +08·3 | +06[s]·2 | +0·1[m] |
| Sept. 3 | 10 | -46·6 | -17·6 | +12·1 | +04[s]·3 | -0·0[m] |

It cleaned up completely by 2[30]

Date Friday Sept 3-4, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2396 F. | | | | | | | +28°.2 | | | | |
| 2397 | HD 181099 | 19 14.0 | 16 31 | I-12 | astra II | .010 | +28°.5 | 19 42 | 20 42 | 1 | 0 00 |
| 2398 | 1938 19 | 20 17.2 | 13 ~~23~~ 10 | — | — | — | 28.5 | 20 45 | 21 47 | 2 | 0 12 11 |

| Ending Time EST | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | 13 8 | focus O.K. Severe thunder storm seen in N something wrong with casing ran focusing motor sometimes carries, sometimes doesn't. focus O.K. |
| -2042 | 0 00 | +16 35 | 1-2 | 7.26 | A3 | 1 1 1 | |
| -2147 | 0 02W | +13 23 | 2 | 7.37 | A0 | 1 1 1 | thunder storm still active in N. clouded up thick from N. before setting on next star |
| | | | | | | | severe thunderstorm from O.K. on |

Date Saturday, Sept 4-5, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
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About 50 visitors.
Showed Ring Nebula and β Cygni with 7½ inch
Jupiter, etc with 4 inch

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | Ended up town at end of visiting hours. Refocused Eyepieces on Vega / Intruder clouds / Right Dec setting button refused to work all evening. |
| | | | | | | Clouds the rest of the night |

Date Sun Sept 5-6, 1937 4d-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2399 | HD 164078 | 17 54.4 | 32 41 | I-12 | Cutina I | 010 | 18.3 | 7.44 | 9.40 | 3 | |
| 2400 | Tours | | | " | " | " | 18.4 | | | 4 | |
| | HD 179838 | 19 09.0 | 29 03 | " | " | " | 18.4 | 8.46 | 9.36 | | |
| 2401 | 198726 | 20 47.2 | 27 52 | " | " | " | 18.3 | 9.39 | 10.11 | 1 | |
| 2402 | 202109 | 21 08.7 | 29 49 | " | " | " | 18.3 | 10 14 | 10.19 | 3 | |
| 2403 | 212075 | 22 16.6 | 13 52 | " | " | " | 18.3 | 10 25 | 11 21 | 2 | |
| 2404 | 212500 | 22 19.4 | 15 48 | " | " | " | 18.3 | 11 24 | 12 44 | 3 | |
| 2405 | 2942 | 00 27.6 | 27 44 | " | " | " | 18.3 | 12 48 | 1 44 | 1 | |
| 2406 | 10635 | 01 39.1 | 32 01 | " | " | " | 18.4 | 1 48 | 2 40 | 2 | |
| | 17007 | 02 38.6 | 29 03 | " | " | " | | | | 5 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 9.43 | W 1h 26 | 32 40 | 0 | 6.96 | $F_5$ | 1½, 1½, 1½ | |
| | Outside thin base | | | | | 12/8 | setting 1 |
| 9.56 | W 1h 07 | 29 08 | 1 | 6.93 | $A_0$ | 1½, 1½, 1½ | " 6 |
| 10.11 | W 4m | 28 00 | 1 | 6 van | $F_{8p}$ | 1½, 1½, 1½ | |
| 10.27 | E 9m | 29 59 | 1 | 4.40 | $K_0$ | 1½, 1½, 1½ | |
| 10.44 | E 16m | 14 03 | 1 | 7.02 | $A_3$ | 1½, 1½, 1½ | |
| 11.03 | 1 04 W | 15 56 | 1 | 7.41 | $F_2$ | 1½, 1½, 1½ | |
| 11.17 | 0 03 E | 27 56 | 1 | 7.16 | $G_5$ | 1-1-1 | |
| 11.30 | 0 19 E | 32 13 | 1 | 6.86 | $A_3$ | 1-1-1 | |
| | | | | 7.34 | $F_0$ | | While setting on this star the cable of the hand control switch caught in observing ladder tearing it. The connections inside. Needs repairs at 5.30 |

Longworth

1937

**Date** Monday Sept 6-7 Y.B. - I. **Julian Day**

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | H.A. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2407 | HD 166095 | 18 040 | 14 16 | I-12 | Astra II | 010 | 20.0 | 7 30 | 8 20 | 3 | 5° W |
| 2408 | HD 189013 | 19 529 | 46 50 | " | " | " | 19.5° | 8 43 | 9 43 | 4 | 16° W |
| 2409 | HD 199986 | 20 55.5 | 45° 52 | " | " | " | 19.5° | 9 47 | 10 37 | 1 | 2° W |
| 2410 | HD 199098 | 20 498 | 44 48 | " | " | " | 196. | 10 41 | 11 11 | 2 | 10° W |
| 2411 | HD 210405 | 22 05.1 | 44 21 | " | " | " | 198 | 11 15 | 12 05 | 3 | 24° W |
| 2412 | HD 210387 | 22 05.0 | 44 22 | " | " | " | 19.3 | 12 07 | 12 55 | 4 | 37° W |
| 2413 | HD 224120 | 23 55.1 | 46 23 | " | " | " | 19.7 | 1 00 | 2 20 | 1 | 31° W |
| 2414 | HD 8764 | 01 22.7 | 3° 02 | " | " | " | 19.5 | 2 24 | 3 34 | 2 | 15° W |
| 2415 | HD 17316 | 02 41 7 | 43 13 | " | " | " | 19.7 | 3 38 | 5 03 | 3 | 28° W |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | 59m W | 14 17 | 1 | 6.36 | A2 | 1-1-1 | |
| | 34m W | 46 56 | 1-2 | 6.90 | A2 | 1-1-1 | Had to jam R.A. slow motion dog loose on wheel & drawing up |
| | 26m W | 46 01 | 3 | 7.09 | A2 | 1-1-1 | |
| | 1h05m W | 44 56 | 3 | 6.59 | K0 | 1-1-1 | |
| | 0 44 W | 44 32 | 2-3 | 6.60 | B9 | 1-1-1 | |
| | 1 34 W | 44 34 | 2 | 6.72 | A0 | 1-1-1 | |
| | 1 09 W | 46 36 | 2 | 7.31 | A2 | 1-1-1 | R.A. setting gave out, set by hand. |
| | 0 5 W | 30 15 | 2 | 7.29 | F5 | 1-1-1 | |
| | 1 0 N | 43 22 | 2 | 7.53 | B9 | 1-1-1 | |

Watch

| | M.T.A. | S.T.A. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|
| | s | m s | s | s | m |
| Sept. 7 A | -47.0 | +14 44.6 | +44.2 | -04.7 | -0.0 |

1937

Date Tuesday Sept 7-8 Y.G – L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | hold. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2416 | HD 165683 | 18 02.1 | 32 14 | I-12 | Astra II | 010 | 20.4 | 7 15 | 7 45 | 4 | |
| 2417 | HD 179280 | 19 06.9 | 31 28 | " | " | " | 20.5 | 7 49 | 8 57 | 2 | |
| 2418 | HD 190227 | 19 58.9 | 31 40 | " | " | " | 20.3 | 9 00 | 10 00 | 1 | |
| 2419 | HD 199169 | 20 50.3 | 27 41 | " | " | " | 20.3 | 10 06 | 10 26 | 2 | |
| 2420 | HD 212186 | 22 17.3 | 15 08 | " | " | " | 20.2 | 10.31 | 11 41 | 3 | |
| 2421 | HD 217731 | 22 57.6 | 44 02 | " | " | " | 20.3 | 11.16 | 12 16 | 4 | |
| 2422 | HD 215664 | 22 41.7 | 44 01 | " | " | " | 20.3 | 12 19 | 12 47 | 1 | |
| 2423 | HD 222114 | 23 24.1 | 15 28 | " | " | " | 20.2 | 12 48 | 1 43 | 2 | |
| 2424 | HD 8815 | 01 21.8 | 27 16 | " | " | " | 20.2 | 1 53 | 3 08 | 3 | |
| 2425 | HD 17656 | 02 45.0 | 46 25 | " | " | " | 20.3 | 3 19 | 4 40 | 1 | |
| 2426 | HD 22124 | 03 28.8 | 31 41 | " | " | " | 20.3 | 3 44 | 4 28 | 2 | |
| 2427 | HD 22317 | 03 30.5 | 28 54 | " | " | " | 20.2 | 4 30 | 5 05 | 3 | |
| | | | | | | | | | | | |
| (12) | | | | | | | | | | | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp. | REMARKS |
|---|---|---|---|---|---|---|
| 30m W | 32 14 | 4 | 6.92 | $K_0$ | 1-1-1 | ] |
| 38m W | 31 31 | 2 | 7.42 | $F_0$ | 1-1-1 | ] |
| 49m W | 31 46 | 2 | 753 | $K_0$ | 1-1-1 | ] |
| 23m W | 27 48 | 2 | 6.42 | $K_5$ | 1-1-1 | ] Faint star ½m ± Cent |
| 19m E | 15 21 | 2 | 6.69 | $A_0$ | 1-1-1 | ) |
| 0 06 W | 44 15 | 2 | 7.51 | $K_0$ | 1-1-1 | |
| 0 49 W | 44 12 | 2 | 6.12 | $F_0$ | 1-1-1 | |
| 1 12 W | 15 40 | 2-1 | 7.04 | $A_2$ | 1-1-1 | |
| 0 34 W | 29 27 | 2-1 | 52 | $F_2$ | 1-1-1 | |
| 0 17 E | 46 33 | 2-1 | 6.75 | $G_5$ | 1-1-1 | |
| 0 13 E | 31 50 | 2-1 | 6.90 | $F_5$ | 1-1-1 | |
| 0 23 W | 29 01 | 2-1 | 6.77 | $A_5$ | 1-1-1 | |

Watch

| | M.T.A. | S.T.A. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|
| Sept. 8 10 | -47.3s | +14m 18.2s | +40.2s | -06.7s | -0.1m |

43

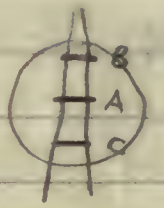
Date Wednesday Sept 8-9, 1937 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| -2428 | Jupiter | 19 16.2 (1937) | -22 44 (1937) | I-12 | Astra IX | .060 L | +22.5 | 7 33 | — | / | |
| | | | | | | | | — | — | | |
| | | | | | | | | — | 7 45 | | |
| 2429 | HD 190047 | 19 58.0 | +30 50 | — | Astra II | .010 | +22.5 | 7 54 | 8 44 | 4 | |
| 2430 | 193819 | 20 17.2 | 13 16 | — | — | — | +22.3 | 8 55 | 10 25 | 1 | |
| 2431 | 210090 | 22 ~~45~~ 43 | 17 ~~42~~ 41 | — | — | — | +22.0 | 10 30 | 11 54 | 2 | |
| 2432 | 218097 | 23 00.2 | 32 56 | — | — | — | +22.2 | 11 59 | 1 29 | 3 | |
| 2433 | 7157 | 01 06.8 | 61 10 | — | — | — | +22.1 | 1 37 | 2 21 | 4 | |
| 2434 | 16245 | 02 31.3 | 29 59 | — | — | — | +22.0 | 2 28 | 3 48 | 1 | |
| 2435 | 21611 | 03 24.2 | 29 42 | — | — | — | +22.0 | 3 54 | 5 12 | 2 | |
| | | | | | | | | | | | |
| (8) | | | | | | | | | | | |

| Evening Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | |
|---|---|---|---|---|---|---|
| | with filter 38A. | | | | | |
| | 0 23E | +30 56 | 1-0 | 6.55 | B8 | 1-1-1 |
| | 1 00W | +13 23 | 1 | 7.37 | A0 | 1-1-1 |
| | 0 43W | +17 42 | 1 | 7.78 | Ma | 1-1-1 |
| | 1 20W (X) | +33 03 | 1-2 | 7.28 | A0 | 1-1-1 |
| | 0 06W | +61 23 | 1-2 | 6.27 | B9 | 1-1-1 |
| | 0 08W | +30 09 | 2-3 | 7.41 | A0 | 1-1-1 |
| | 0 40W | +29 50 | 2-3 | 7.51 | A0 | 1-1-1 |

REMARKS

Pl setting Gfr Plane Setting

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55 50 A
56 00 A
56 50 A
57 00 A
57 50 A
58 00 A
58 50 A
59 00 A
59 50 A
60 00 A

scale 25 2
scale 120 2
scale 15 2

get wrong star at first moved plate over to

| | M.J.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|
| Sept. 9 10 | -47.1 | +15 11.8 | +42.8 | -07.6 | -0.2 |

45

Date Thurs Sept 9-10, 1937 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2436 | HD 190167 | 19 58.6 | 28 ~~14~~ | I-12 | Astra II | 010 | 21.5° | 9 03 | 9 43 | 3 | W 40m |
| 2437 | HD 202109 | 21 08.7 | 29 49 | " | " | " | 21.5 | 9 46 | 9 49 | 4 | E 24m |
| 2438 | " 210130 | 22 03.1 | 12 34 | " | " | " | 21.6 | 9 57 | 11 23 | 1 | W 16m |
| 2439 | " 212075 | 22 16.6 | 13 52 | " | " | " | 21.6 | 11 26 | 0 16 | 2 | W 55m |
| 2440 | " 874 | 00 08.0 | 16 22 | " | " | " | 21.6 | 0 19 | 1 29 | 3 | W 1m |
| 2441 | " 886 | 00 08.1 | 14 38 | " | " | " | 21.6 | setting 3 | 15 secs | 4 | - |
| - | - | - | - | - | - | - | - | setting 5 | 30 secs | - | - |
| - | - | - | - | - | - | - | - | setting 8 | 60 secs | - | W 24m |
| 2442 | " 9312 | 01 26.6 | 16 28 | " | " | " | 21.6 | 1 42 | 2 52 | 1 | W 21m |
| 2443 | " 17007 | 02 38.6 | 29 03 | " | " | " | 21.6 | 3 00 | 4 00 | 2 | W 17m |
| 2444 | " 22418 | 03 31.3 | 30 48 | " | " | " | 21.5 | 4 03 | 5 03 | 3 | W 27m |
| (9) | | | | | | | | | | | |

Fri, Sept 10-11, 1937 - Hd-MR - cloudy

Saturday Sept 11-12, M - heavy wind, clouds

wind too strong to open

Cleaning after rain

| Ending Time B.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 3 43 3 | W 40m | 28 20 | 3 | 6.77 | $B_9$ | 1½, 1½, 1½ | |
| 3 49 | E 24m | 29 59 | 3 | 4.40 | $K_0$ | 2, 2 | |
| 1 23 1 | W 16m | 12 46 | 3 | 7.70 | $A_5$ | 1½, 1½, 1½, | |
| 0 12 2 | W 55m | 14 04 | 2 | 7.02 | $A_3$ | 1½, 1½, 1½, | |
| 1 29 3 | W 17m | 16 35 | 2-3 | 7.40 | $G_5$ | 1½, 1½, 1½ | comparison arc switch acting up. |
| 15 min 4 | - | - | - | 2.68 | $B_2$ | 4 | |
| 30 min | - | - | - | - | - | -4 | |
| 60 min | W 24m | - | - | - | - | 4 | |
| 2 52 1 | W 21m | 16 38 | 3 | 7.59 | $G_5$ | 1½, 1½, 1½ | |
| 4 00 2 | W 17m | 29 12 | 3 | 7.34 | $F_0$ | 1½, 1½, 1½ | Star is a double. Took [sketch] brighter comp. |
| 5 03 3 | W 27 | 30 54 | 3 | 7.43 | $F_5$ | 1½, 1½, 1½ | |
| | | | | | | | Watch M.T. S.T. |
| | | | | | | | Sept. 10. 10 -46 s +15 57.6 -08.8 -0.2 m |
| | | | | | | | |
| | — hydro on and off all evening | | | | | | About 10 visitors. showed moon Jupiter with small telescope, demonstrated Cygni. |

Date Sunday Sept 12-13, 1937 I-1 Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2445 | HD 168271 | 18 13.8 | +12 56 | I-12 | Astro II | 0.5 | Sat+ 14.2 | 19 26 | 20 41 | 1 | |
| | " 183794 | 19 26.1 | -02 19 | " | " | " | | | | | |
| 2446 | " 181799 | 19 16.8 | +60 46 | " | " | " | 14.2 | 20 48 | 21 48 | 2 | |
| 2447 | 201078 | 21 02.3 | +30 47 | " | " | " | 14.3 | 21 52 | 22 22 | 3 | |
| 2448 | 200877 | 21 01.1 | +14 56 | " | " | " | 14.1 | 22 24 | 22 29 | 4 | |
| 2449 | 209693 | 22 08.2 | +52 27 | " | " | " | 14.2 | 23 33 | 00 28 | | |
| 2450 | 21749 | 22 56.0 | +44 50 | " | " | " | 14.3 | 00 27 | 01 37 | 1 | |
| 2451 | 4917 | 00 43.2 | +61 16 | " | " | " | 14.3 | 01 5 | 02 11 | 2 | |
| 2452 | 6210 | 00 58.1 | +61 04 | " | " | " | 14.3 | 02 13 | 02 43 | 3 | |
| 2453 | 16933 | 02 37.8 | +46 26 | " | " | " | 14.1 | 02 46 | 04 10 | 4 | |
| 2454 | 22871 | 04 22.5 | +30 01 | " | " | " | 14.0 | 04 15 | 05 00 | 1 | |

(10)

Clouds at start. Clouds [illegible] entirely about 11
first star tried (HD 183794)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 35 W | +12 57 | 1 | 6.54 | B9 | —3— | Clouds most of time with $20^{05}$ |
| | | | | 7.0V | B9 | Too far W to get in sequence | dew switch not working. Shutter at in switch, under repair. |
| | 1 40 W | +60 50 | 1-2 | 6.99 | B9 | 1-1-1 | |
| | 0 27 W | +30 57 | 1-2 | 6.28 | F5 | 1, 1, 1 | Clouds |
| | 1 35 W | +15 05 | 2 | 7.04 | E5 | 1, 1, 1 | Clouds, star lost a few minutes. |
| | 1 30 W | +35 38 | 2 | 7.17 | G5 | 1. 1, 1 | |
| | 1 [illegible] W | +46 03 | 2 | 6.50 | $A_2$ | 1, 1. 1 | Clouds |
| | [illegible] W | +61 27 | 2 | 7.43 | $K_2$ | 1, 1. 1 | |
| | [illegible] W | +01 14 | 2 | 6.33 | F8 | 1. 1. 1 | |
| | [illegible] W | +40 35 | 2 | 7.40 | F5 | 1. 1 | |
| | 5 E | +30 14 | 2 | 6.60 | F5 | 1. 1. 1 | |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| | | | Seconds | | | |
| Sept. 13 | 13 | -47.2 | Greatest | +11.3 | +47.0 | +0.8 |

Date Wednesday - Sept 15-16, 1937 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2455 | HD 191671 | 20 6.0 | 27 58 | I-12 | Astra II | .010 | +15.4 | 8 20 | 9 10 | 2 | 1 24 + |
| ~~2456~~ | ~~210661~~ | | | | | | | | | | |
| 2456 | HD 210661 | 22 06.8 | 28 45 | — | — | — | +15.2 | 11 09 | 1 09 | 3 | 2 33 + |
| 2457 | 10681 | 01 39.2 | 27 58 | — | — | — | +15.3 | 1 21 | 2 50 | 4 | 0 33 W |

(3)

Clouds at sunset and early evening. Partly clearing later

| Ending Time U.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 1 10 2 | 0 25 W | +28 06 | 1-0 | 7·5 | B5 | 1-2 | intermittent clouds leaving from 8 55 on take 8 53 end of exposure |
| | | | | | | | M.T.A. S.T.A. S.W. M.T. S.T. |
| | | | | | | | Sept 14 10 -47·8 2 +25 55·1 +1 03·3 +43·6 +0·8 |
| | | | | | | | 15 10 -47·3 +26 55·6 +1 09·2 +45·1 +0·8 |
| | | | | | | | closed at 10 15 but clouds over again before could complete the setting |
| | | | | | | | R.A. setting motor very bad |
| 1 [illegible] | 2 23 W | +28 56 | 1 | 7·5 | A2 | 1-1-1 | Closed again at 11.00 |
| 2 50 | 0 31 W | +28 09 | 1 | 7.31 | A0 | 1-1-1 | clouds at 2 50 |
| | | | | | | | closed at 3 40 ; rain. |

Bracket which holds guide plate comes to be fastened

Watch

Sept. 16 10 -48·0 +26 53·8 +0m 11·5s -28·2s -0·6m
Adv 1 m. advanced 1m

Date Thursday Sept 16-17, 1937 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2458 | HD187613 S | 19 45.8 | 44 07 | 7-12 | astro II | 1010 | +13°0 | 19 40 | 21 26 | 1 | 1 03 W |
| 2459 | 199206 | 20 50.6 | 44 44 | — | — | — | 13.0 | 21 28 | 23 09 | 2 | 1 02 W |
| 2460 | 218472 | 23 3.2 | 30 55 | — | — | — | 13.0 | 23 03 | 24 13 | 3 | 0 38 W |
| 2461 | 1243 | 00 11.6 | 13 22 | — | — | — | 13.1 | 00 18 | 02 16 | 4 | 1 27 W |
| 2462 | 16594 | 02 34.5 | 31 53 | — | — | — | 13.0 | 02 20 | 04 18 | 1 | 0 [illegible] W |
| 2463 | 35173 | 05 17.8 | 15 55 | — | — | — | 12.7 | 04 24 | 05 25 | 2 | 0 [illegible] E |

(6)

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | Cloud at sunset – clearing later. |
| 1 03W | +44 13 | 1 | (6.77) | B8 | 1-1-1 | |
| 1 32W | 44 53 | 1 | 7.4 | B9 | 1-1-1 | |
| 0 33W | 31 07 | 1 | 7.34 | A2 | 1-1-1 | |
| 1 27W | 13 34 | 1 | 7.58 | $A_3$ | 1-1-1 | |
| 1 07W | 32 03 | 1 | 7.56 | $A_2$ | 1-1-1 | |
| 0 29E | 16 00. | 1 | 6.09 | B8 | 1-1-1 | wide double; took brighter comp. |

| | | M.T.A. | S.T.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Sept. 17 | 10 | -48.0 | +26 52.7 | +16.7 | -28.0$^s$ | -0.5$^m$ |

1937

Date Friday Sept 17-18 Y-G – MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2464 | HD 166095 | 18 04.0 | 14 16 | I-12 | astra II | .010 | 12.0 | 7 00 | 7 24 | 1 | .6° W |
| 2465 | HD 174621 | 18 46 3 | 43 37 | " | " | " | 12.0 | 7 30 | 8 20 | 2 | ° W |
| 2466 | HD 192715 | 20 11.2 | 15 00 | " | " | " | 12.6 | 8 25 | 9 05 | 3 | ° W |
| 2467 | HD 199986 | 20 55.5 | 45 52 | " | " | " | 12.0 | 9 10 | 9 50 | 4 | ° E |
| 2468 | HD 215664 | 22 41.7 | 44 01 | " | " | " | 11.7 | 9 55 | 10 15 | 1 | ° E |
| 2469 | HD 217731 | 22 57.6 | 44 02 | " | " | " | 11.7 | 10 17 | 11 06 | 2 | ° E |
| 2470 | HD 224720 | 23 55.1 | 46 23 | " | " | " | 12.0 | 11.09 | 12.19 | 3 | ° E |
| 2471 | HD 2436 | 00 23.0 | 15 54 | " | " | " | 11.7 | 00 24 | 01 22 | 4 | ° W |
| 2472 | HD 10588 | 01 38.2 | 31 43 | " | " | " | 11.7 | 01 25 | 02 25 | 1 | ° W |
| 2473 | HD 13596 | 02 07.6 | 14 48 | " | " | " | 11.8 | 02 30 | 02 46 | 2 | ° W |
| 2474 | HD 23139 | 03 37.7 | 45 48 | " | " | " | 11 5 | 02 50 | 03 34 | 3 | ° E |
| | | | | | | | | | | | |
| (11) | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | Saturday Sept. 18-19, 1937 | | | H-MR | | Cloudy | | | | |
| | | | | | | | No visitors. | | | | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | Comp | REMARKS | |
|---|---|---|---|---|---|---|---|
| | 46m W | 14 16 | 3-2 | 6.36 A2 | 1-1-1 | | S |
| | 1h W | 43 38 | 3-2 | 757 G5 | 1-1-1 | | S |
| | 20m W | 15 07 | 3-2 | 7.19 F0 | 1-1-1 | | |
| | 21m W | 46 01 | 3 | 709 A2 | 1-1-1 | | |
| | 1h E | 44 13 | 3 | 6.12 F0 | 1-1-1 | | |
| | 22m E | 44 14 | 3 | 751 K0 | 1-1-1 | | |
| | 09m E | 46 35 | 3-2 | 731 A2 | 1-1-1 | | S |
| | 26m W | 16 07 | 3 | 753 K2 | 1-1-1 | | S |
| | 14m W | 31 54 | 3 | 7.20 G5 | 1-1-1 | intermittent clouds 1 50 to 2 15 | S |
| | 05m W | 15 00 | 3 | 6.17 K5 | 1-1-1 | | S |
| | 37m E | 45 55 | 2 | 6.23 A5 | 1-1-1 | light clouds at 300. thick at 345 | S |

| | H.T.A. | S.I.A. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|
| Sept. 18 10 | -48s.0 | +26m 52s.0 | +20s.0 | -45s.0 | -0m.8 |

Date Monday Sept 20-21, 1937 Hd – L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2475 | HD 169028 | 18 17.6 | 51 18 | I-12 | Cutina L | 010 | 12.0 | 7.01 | 7 51 | 1 | N 1/2 |
| 2476 | 199311 | 20 51.3 | 45 51 | " | " | " | 12.1 | 7.55 | 8-35 | 2 | 2 38 |
| 2477 | 200102 | 20 38.3 | 44 36 | " | " | " | 12.2 | 8.38 | 9.47 | 3 | W 30 |
| ~~2478~~ | ~~874~~ | ~~00 08.0~~ | ~~76 02~~ | " | | | ~~11.4~~ | ~~11.31~~ | | 4 | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| W 1 1/2 | 51 19 | 2 | 7.32 | $\pi_2$ | 1, 1, 1 | Sept. 20 10 — M.C. -48.0s S.C. -09.8s Adv. 27m S.W. -05.3 Reset — Watch M.T. -20.9s S.T. +0.1m Reset. |
| E 38m | 46 00 | 3 | 6.66 | $A_0$ | 1, 1, 1 | |
| W 30m | 44 46 | 4 | 7.57 | $G_5$ | 1/2, 1, 1 | Clouds. Tall middle 9.00 |
| | | | 7.40 | $G_5$ | 1/2 | Clouds from 11 35 - 11 55 partially clearing filled in solid at 12 05. Clear at 1.5 quite solid at 2.00 |
| | | | | | | Sept. 21 10 -48.0s -10.5s -02.2s -21.2s +0.1m |

57

Date Tues Sept 21-22 1937 YG - L. Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2478 | HD 187237 | 19 43.9 | 27 36 | I-12 | astra II | 010 | 140 | 8.00 | 8 46 | 1 | |
| | Focus | | | | | | | | | | |
| 2479 | HD 197961 | 20 42.0 | 46 00 | " | " | " | 140 | 8.49 | 9 13 | 2 | |
| 2480 | HD 197139 | 20 36.6 | 43 05 | " | " | " | 140 | 9.16 | 9 36 | 3 | |
| 2481 | HD 199986 | 20 55.5 | 45 52 | " | " | " | 139 | 9.39 | 10 09 | 4 | |
| 2482 | HD 209813 | 22 010 | 46 45 | " | " | " | 139 | 10 12 | 10 42 | 1 | |
| 2483 | HD 210405 | 22 05.1 | 44 21 | " | " | " | 136 | 10.45 | 11 09 | 2 | |
| 2484 | HD 210387 | 22 05.0 | 44 22 | " | " | " | 136 | 11.11 | 11 35 | 3 | |
| 2485 | HD 1375 | 00 12.8 | 12 13 | " | " | " | 136 | 11.39 | 12 09 | 4 | |
| 2486 | HD 2436 | 00 23.6 | 15 54 | " | " | " | 135 | 12 13 | 12 43 | 1 | |
| 2487 | HD 2409 | 01 22.1 | 30 02 | " | " | " | 13.8 | 12 46 | 01 2 | | |
| 2488 | HD 10363 | 01 36.1 | 43 08 | " | " | " | 135 | 01 53 | 02 30 | | |
| 2489 | HD 11316 | 02 41.1 | 47 13 | " | " | " | 13.7 | 02 03 | 03 13 | | |
| 2490 | HD 21686 | 03 18.8 | 26 18 | " | " | " | 13.5 | 03 16 | 03 54 | 1 | |
| 2491 | HD 25541 | 04 [illegible] | 17 12 | " | " | " | 136 | 03 57 | 04 27 | 2 | |
| 2492 | HD 27349 | 04 13.7 | 31 49 | " | " | " | 137 | 04 30 | 05 20 | 3 | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp. | REMARKS |
|---|---|---|---|---|---|---|
| 44m W | 27 43 | 2-3+ | 7.53 | G5 | 1-1-1 | |
| | | | | | 8-6 | Focus lost with focus as was before. |
| 14m W | 46 07 | 5 | 6.63 | A0 | 1-1-1 | Taken by Lincoln for 197139 |
| 42m W | 43 14 | 5 | 7.15 | K0 | 1-1-1 | |
| 51m W | 46 02 | 5 | 7.09 | A2 | 1-1-1 | |
| 24m W | 46 57 | 6 | 7.52 | K0 | 1-1-1 | |
| 47 W | 44 32 | 16 | 6.60 | B9 | 1-1-1 | S.E star |
| 103 W | " | 6 | 6.72 | A0 | 1-1-1 | |
| 0 21E | 12 35 | 5 | 7.41 | G5 | 1-1-1 | |
| 0 03 W | 16 06 | 5-6 | 7.53 | K2 | 1-1-1 | |
| 0 28 E | 30 14 | 5-6 | 7.29 | F5 | 1-1-1 | |
| 0 07 W | 45 10 | 5-3 | 7.11 | A0 | 1-1-1 | Long hanging cap 14 |
| 0 14 W | 43 28 | 3 | 7.13 | B9 | 1-1-1 | |
| 0 18 W | 28 25 | 3 | 6.91 | A0 | 1-1-1 | |
| 0 04 E | 17 07 | 3 | 7.08 | G5 | 1-1-1 | |
| 0 41 W | 31 41 | 3 | 7.31 | K5 | 1-1-1 | |

Date Wed Sept 22-23/37 Hd - MR. Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2493 | HD 174504 | 18 45.7 | 45 09 | I-12 | Extra II | 010 | 17.0 | 6.57 | 7.37 | 1 | W 38 |
| 2494 | 175865 | 18 52.3 | 43 49 | " | " | " | 17.7 | 7.40 | 7.48 | 2 | W 33 |
| 2495 | 177829 | 19 01.2 | 43 43 | " | " | " | 17.5 | 7.46 | 8.30 | 3 | W 11 |
| 2496 | 199511 | 20 52.6 | 43 02 | " | " | " | 17.1 | 8.34 | 9.18 | 4 | W 1 |
| 2497 | 200102 | 20 56.3 | 44 36 | " | " | " | 17.2 | 9.20 | 10.30 | 1 | W 4 |
| 2498 | 208394 | 21 50.9 | 47 44 | " | " | " | 17.0 | 10.34 | 11 34 | 2 | W 10 |
| 2499 | 222900 | 23 39.6 | 45 49 | " | " | " | 16.9 | 11.37 | 12 37 | 3 | W C 44 |
| 2500 | 2453 | 00 23.2 | 31 53 | " | " | " | 17.0 | 12 40 | 01 10 | 4 | W C 33 |
| 2501 | 3369 | 00 31.5 | 33 10 | " | " | " | 17.0 | 01 14<br>01 18 | 01 16<br>01 22 | 1 | W C 3<br>W C 37 |
| 2502 | 3627 | 00 34.0 | 30 19 | " | " | " | 17.2 | 01 29<br>01 33 | 01 31<br>01 37 | 2 | W C 44<br>W C 50 |
| 2503 | 8126 | 01 15.6 | 28 13 | " | " | " | 17.0 | 01 42 | 02 02 | 3 | W C 33 |
| 2504 | 17007 | 02 38.6 | 29 03 | " | " | " | 17.2 | 02 05 | 03 25 | 4 | W C 33 |
| 2505 | 22418 | 03 31.3 | 30 48 | " | " | " | 16.8 | 03 29 | 04 19 | 1 | W C 33 |
| 2506 | 27579 | 04 16.1 | 13 21 | " | " | " | 17.1 | 04 25 | 05 30 | 2 | W 1 01 |
| F | FOCUS | — | — | " | " | " | 16.9 | — | — | | OUTSIDE |

(14)

Changed Focus from 26.23 to 26.28.

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | H.C. S.C. S.W. Watch H.W. S.W. |
| W 38m | 45 11 | 1 | 7.12 | $F_0$ | 1, 1, 1 | Sept 22 10 -47.8 -11.3 +02.5 -21.0 -0.1 |
| W 37m | 43 51 | 1 | var 4 | $M_6$ | 3 | |
| W 1h 16 | 43 47 | 0 | 6.76 | $B_9$ | 1, 1, 1 | |
| W 12m | 43 12 | 2 | 6.74 | $B_8$ | 1, 2 | |
| W 1h 24 | 44 45 | 1 | 7.57 | $G_5$ | 1, 1, 1 | Water dripping out of cell. |
| W 1h 30 | 47 55 | 3 | 7.41 | $A_2$ | 1, 1, 1 | |
| W 0h 44m | 46 02 | 3 | 7.48 | $A_0$ | 1, 1, 1 | |
| W 0h 33m | 32 06 | 3 | 6.71 | $A_0p$ | 1, 1, 1 | |
| W 0 31 | 33 22 | 3 | 4.27 | $B_3$ | 3 | setting 3 |
| W 0 37 | | | | | 3 | " 6 |
| W 0 44 | 30 31 | 3 | 4.56 | $K_2$ | 3 | " 3 |
| W 0 50 | | | | | 3 | " 6 |
| W 0 33 | 28 24 | 3 | 6.60 | $K_0$ | 1, 1, 1 | |
| W 0 33 | 29 10 | 3 | (7.34) | $F_0$ | 1, 1, 1 | |
| W 0 35 | 30 56 | 3 | 7.43 | $F_5$ | 1, 1, 1 | |
| W 1 01 | 13 26 | 3 | 7.48 | $A_5$ | 1, 1, 1 | setting 5 |
| OUTSIDE THROUGH BASE | | | - | - | 10/6 | Focus = 26.28 Tilt = 19.59 setting 9 |
| | | | | | | Sept 23 10 -47.8 -12.9 +04.8 -22.6 +0.1 |

61

Date Thursday, Oct 23-24/37 H-MP Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2507 | HD 154494 | 17 00.7 | +12 53 | I-12 | Kodak II | set 010 | +21.4 | 18 50 | 18 55 | 1 |
| | " | | | | | | | 18 56 | 19 01 | |
| 2508 | HD. 163590 | 17 51.8 | +32 28 | " | " | " | +21.7 | 19 06 | 19 11 | 2 |
| 2509 | 183794 | 19 26.1 | -02 19 | " | " | " | +21.6 | 19 49 | 20 [illegible] | 3 |
| 2510 | 171647 | 18 31.0 | +46 08 | " | " | " | +21.7 | 20 23 | 20 48 | 4 |
| 2511 | 192187 | 19 33.7 | +13 08 | " | " | " | +21.6 | 20 51 | 21 [illegible] | |
| 2512 | 187951 | 19 47.9 | +30 53 | " | " | " | +21.5 | 21 15 | 21 [illegible] | 2 |
| 2513 | [illegible] | 22 [illegible] | -29 [illegible] | " | " | " | +21.4 | 22 [illegible] | 23 [illegible] | 3 |
| | [illegible] | | | " | " | " | +21.4 | 23 [illegible] | | |
| 2514 | HD 206155 | 21 [illegible] | +18 [illegible] | " | " | " | +21.3 | 23 19 | 0 [illegible] | 4 |
| 2515 | 22671 | 22 [illegible] | +59 29 | " | " | " | +21.3 | 00 14 | 01 24 | |
| 2516 | 1606 | 00 15.2 | +30 23 | " | " | " | +21.2 | 01 29 | 01 54 | 2 |
| 2517 | 8941 | 01 23.0 | +16 34 | " | " | " | +20.8 | 01 57 | 02 57 | 3 |
| 2518 | 16933 | 02 37.8 | +46 26 | " | " | " | +21.0 | 03 01 | 04 04 | 4 |
| 2519 | 32356 | 04 57.5 | +61 02 | " | " | " | +20.8 | 04 11 | 04 46 | 1 |
| 2520 | 33618 | 05 06.4 | +59 16 | " | " | " | +21.2 | 04 50 | 05 30 | 2 |

Partially fogged mirror 2nd from to harvest it; found it heavily fogged. Put it
Mirror clear of fog at sunset, and fairly bright; stuff in the 2nd.



| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | +12 49 | 4 | 4.99 | A3 | -3- | |
| 1 50 W | | | | | | Offset 3 from 3 |
| 1 45 W | +32 27 | 4 | 7.20 | A0 | 1-1-1 | Mirror figure [illegible] |
| 0 42 W | -02 15 | 5-6 | 7+ | B8 | 1-1-1 | |
| 2 [illegible] W | +[illegible] 11 | 5 | 6.66 | A0 | 1-1-1 | |
| 2 29 W | +43 10 | 4 | 6.40 | A5 | 1-1-1 | |
| 1 58 W | +31 00 | 3 | 7.08 | A5 | 1-1-1 | |
| 2 16 W | +29 15 | 3-2-1 | 7.54 | B9 | 1-1-1 | [illegible] |
| Outside three bars | | | | | 10/0 | [illegible] |
| 2 24 W | +08 53 | 1-2 | 6.8-7.5 | A0 | 1-1-1 | |
| 1 46 W | -5[illegible] 41 | 2 | 7.41 | A2 | 1-1-1 | |
| 1 30 W | +30 35 | 1-0 | 5.77 | B8 | 1-1-1 | |
| 1 25 W | +16 46 | 1 | 7.17 | F5 | 1-1-1 | |
| 1 17 W | +46 34 | 2 | 7.40 | F5 | 1-1-1 | |
| 0 22 E | +61 03 | 2 | 7.27 | K0 | 1-1-1 | |
| 0 14 W | +59 18 | 2 | 7.36 | K0 | 1-1-1 | Mirror OK |

Date Friday, Sept 24-25, 1937 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Incl |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2521 | HD 169247 | 18 18.7 | +14 39 | I-12 | Astra II | .010 | +21°.8 | 18 50 | 20 06 | 1 | 1 1/4 W |
| 2522 | 182381 | 19 19.3 | +15 49 | — | — | — | 21.5 | 20 09 | 22 08 | 2 | 2 3/4 W |
| 2523 | 218428 | 23 2.9 | +29 31 | — | — | — | 21.5 | 22 13 | 23 43 | 3 | 0 30 W |
| 2524 | 1243 | 00 11.6 | +13 22 | — | — | — | 21.6 | 23 47 | 00 57 | 4 | 0 40 W |
| 2525 | 18473 | 02 53.1 | +59 17 | — | — | — | 21.5 | 01 09 | 02 09 | 1 | 0 50 E |
| 2526 | 17091 | 02 47.3 | +46 44 | — | — | — | 22.0 | 02 13 | 02 55 | 2 | 0 32 W |
| 2527 | 20458 | 03 12.4 | +13 29 | — | — | — | 21.8 | 03 00 | 04 30 | 3 | 1 1/2 W |
| 2528 | 44766 | 06 18.5 | +29 46 | — | — | — | 21.8 | 04 34 | 05 20 | 4 | 1 0 E |
| F | FOCUS | — | — | — | — | — | 21.7 | — | — | | OUT OF DE |

(8)

Saturday, Sept 25-26 M-MR

No Visitors!

Rained evening, see next page

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | light haze near horizon |
| | 1 41 W | +14 39 | 0 | 6.67 | B9 | 1-1-1 | Sept. 24 10 M.C. -47.6 S.C. -12.6 S.W. +12.3 Wetal M.T. -23.8 S.T. +0.1 |
| | 2 43 W | +15 54 | 0 | 7.48 | A2 | 1-1-1 | |
| | 0 35 W | +29 42 | 0 | 7.23 | B9 | 1-1-1 | |
| | 0 40 W | +13 35 | 2 | 7.58 | A3 | 1-1-1 | occasional clouds near end |
| | 0 50 E | +59 24 | 2+ | 7.35 | A0 | 1-1-1 | N-comp |
| | 0 02 W | +46 55 | 2 | 6.71 | B9 | 1-1-1 | |
| | 1 12 W | +13 37 | 1-0 | 7.42 | A0 | 1-1-1 | occasional clouds |
| | 1 04 E | +29 43 | 1± | 6.50 | B9 | 1-1-1 | selby 5 |
| | OUTSIDE THROUGH BASE | | | | | 10/6 | FOCUS = 26.28 TILT = 19.59 selby 9 |
| | | | | | | | Sept. 25 10 -47.6 -13.4 +16.8 -24.9 +0.0 |

Date Saturday, September 25-26 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2529 | HD 43683 | 06 12.4 | +14 25 | I-12½ | Ashâ II | .010 | 13.4 | 04 41 | 05 15 | 1 | 0 59 E |
| F | FOCUS | - | - | I-12½ | Ashâ II | .010 | 13.1 | 05 45 | - | - | 0.75 E |
| 2530 | HD 56537 | 07 12.3 | +16 43 | I-12½ | Ashâ II | .010 | 13.2 | 30 sec | 05 21 | 2 | 0 52 E |
| | - | - | - | - | - | - | - | 1 min | 05 28 | | 0 45 E |
| | - | - | - | - | - | - | - | 2 min | 05 32 | | 0.41 E |
| | - | - | - | - | - | - | - | 4 min | 05 37 | | 0 36 E |

(2)

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS | |
|---|---|---|---|---|---|---|---|
| 0 59 E | +14 24 | 0 | 5.98 | $A_0$ | 1—1—1 | | setting 5 |
| OUTSIDE | THROUGH | BASE | - | - | 12-8 | FOCUS = 26.28 TILT = 19.59 | setting 9 |
| 01 52 E | +16 39 | 0 | 3.71 | $A_2$ | 3 | FOR Hd | setting 2 |
| 01 45 E | - | - | - | - | 3 | | setting 4 |
| 01 41 E | - | - | - | - | 3 | | setting 6 |
| 01 36 E | - | - | - | - | 3 | | setting 8 |

see previous page.
Power off from 2 to 4 20
Clear about 4
R.A. setting motion broken again

Burnished Mirror Sunday P.M. (It might do with a little more)
Made a temporary fix on R.A. motion. Could not find
suitable spring so used an elastic for time being.

67

1937

Date Sunday Sept 26-27 Y-G - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2531 | HD 180583 | 19 12.0 | 27 45 | I-12 | astra II | 0.10 | 12.0 | 7 09 | 7 59 1 | 5.4 W |
| 2532 | HD 198151 | 20 43.3 | 46 10 | " | " | " | 12.3 | 8 04 | 9 04 2 | 1.4 W |
| 2533 | HD 201483 | 21 09.4 | 29 48 | " | " | " | 12.4 | 9 08 | 9 38 3 | 2.2 W |
| 2534 | " | " | " | " | " | " | 12.0 | 9 39 | 10 09 4 | 0.6 W |
| 2535 | HD 218895 | 23 02.6 | 32 18 | " | " | " | 16.5 | 11 09 | 11 49 2 | 3.4 W |
| 2536 | HD 4335 | 00 40.7 | 44 18 | " | " | " | 16.5 | 11 53 | 12 38 1 | 2.6 W |
| 2537 | " | " | " | " | " | " | " | 12 39 | 1 24 3 | 1.8 W |
| 2538 | HD 13596 | 02 07.6 | 14 45 | " | " | " | 14.5 | 1 29 | 2 01 1 | 4.0 W |
| 2539 | HD 16187 | 02 30.8 | 31 10 | " | " | " | 14.5 | 2 05 | 2 20 2 | 3.2 W |
| 2540 | HD 22231 | 03 30.5 | 28 54 | " | " | " | 14.5 | 3 25 | 4 30 3 | 0.0 |
| 2541 | HD 23139 | 03 37.7 | 45 48 | " | " | " | 14.4 | 4 34 | 5 35 4 | 1.0 E |

Clearing at Sunset

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp. | REMARKS |
|---|---|---|---|---|---|---|
| 51m W | 27° 48 | 1 | 6.56 | F5p | 1-1-1 | Image 15-20" in diam, very diffuse |
| 23m W | 46 17 | 1 | 6.32 | A2 | 1-1-1 | |
| 36m W | 29 55 | 1 | 5.57 | A0 | 1-1-1 | |
| 1 06 W | " | 1 | 5.57 | A0 | 1-1-1 | Temp relay failed at 16.0° up to prob this plate N G. |
| 48m W | 32 29 | 1 | 6.03 | A2 | 1-1-1 | New Batteries put on reset at 16.5° at 10h45m |
| 0 00 | 44 30 | 1 | 5.94 | B8 | 1-1-1 | |
| 0 46 W | " | 1 | " | " | 1-1-1 | |
| 0 04 E | 14 5[illegible] | 1 | 6.17 | K5 | 1-1-1 | |
| 0 52 W | 31 2[illegible] | 1 | 7.1[illegible] | A0 | 1-1-1 | |
| 1 02 W | 24 [illegible] | 1 | 6.79 | A5 | 1-1-1 | |
| 1 45 W | 15 53 | 1 | 6.23 | A5 | 1-1-1 | |

| | | M.S. | S.C. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Sept. 27 | 12 | -47.3 | -3.47 | +23.3 | -25s.8 | +0m.2 |

Date Monday, Sept 27-28, 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2542 | HD 198414 | 20 45.1 | 45 05 | I-12 | Eastman II | .010 | +12°3 | 20 04 | 21 20 | 1 |
| 2543 | " 22480 | 23 55.7 | 44 42 | — | — | — | +12.0 | 23 29 | 00 19 | 2 |
| 2544 | " 4701 | 00 44.0 | 47 13 | " | " | " | +12.5 | 00 22 | 1 12 | 4 |
| 2545 | " 11188 | 01 44.9 | 46 58 | " | " | " | +12.0 | 1 16 | 2 01 | 1 |
| 2546 | " 15992 | 02 29.1 | 44 12 | " | " | " | +12.0 | 2 04 | 3 14 | 2 |
| 2547 | " 21379 | 03 21.8 | 12 23 | " | " | " | +12.3 | 3 19 | 3 45 | 3 |
| 2548 | " 26039 | 04 02.3 | 16 16 | " | " | " | +12.0 | 4 49 | 5 20 | 4 |

(1)

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | Clouds at sunset - partially cleared later but still light clouds settling down by 2 or 3 mags |
| | +45 12 | 2 | 7.47 | A0 | 1-1 | better at 20h though still considerable haze in zenith. Heavy clouds all around horizon |
| | | | | | | Haze thicker, stars gone at 20,30 |
| | | | | | | Apparently thicker. Cut off seeing at 21.20 |
| | | | | | | Closed down at 22.30 |
| | | | | | | Having slightly cleared again at 23,15 |
| 0 30 W | +44 55 | 2 | 6.25 | A0p | 1-1-1 | haze still present |
| 0 34 W | +47 25 | 2-3 | 7.03 | $A_2$ | 1-1-1 | |
| 0 22 W | +47 07 | 2-3 | 7.09 | B8 | 1-1-1 | |
| 0 51 W | +44 20 | 2-3 | 7.40 | B9 | 1-1-1 | |
| 0 30 W | +12 30 | 2-3 | 6.20 | A0 | 1-1-1 | |
| 1 25 W | +16 21 | 2-3 | 7.50 | B9 | 1-1-1 | Broken clouds. |

| | | M.S. | S.C. | S.W. | Watch M.W. | S.W. |
|---|---|---|---|---|---|---|
| Sept. 28 | 12 | -46.8 | -15.4 | +29.2 | -26.2 | +0.0 |

Date Sunday Sept 28-29, 1937, 14-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2549 | HD 180778 | 19 12.8 | +59 31 | I-12 | Eastman II | Sect 010 | +13.8 | 18 46 | 20 11 | 1 | |
| 2550 | 197665 | 20 4.1 | +76 29 | " | " | " | +13.5 | 20 14 | 21 24 | 2 | |
| 2551 | 203551 | 21 17.9 | -60 15 | " | " | " | +12.3 | 21 28 | 22 18 | 3 | |
| | From HD | | | | | " | | 22 19 | | | |
| | 213126 | 22 24.2 | -87 34 | " | " | " | | | | | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 09 W | +59 36 | 1-2 | 7.54 | A3 | 1-1-1 | Cal. E of fine; Follow off end of run. Lights. |
| 0 57 W | +76 38 | 1-2 | 7.41 | F2 | 1-1-1 | Light clouds. |
| 7 11 W | +60 27 | 1-2 | 7.16 | F5 | 1-1-1 | Clouds. Think 22°5 |
| Total Hr. Time | | | | | 10-7 | Dish 2.25, Cal 1958 |
| | | | ~~7.48~~ | ~~F2~~ | | Closed at 23°00. Left Bf closed 23 E |
| | | | | | | Light rain 23 30 |

| | | M.P. | S.P. | S.W. | Watch M.W. | Watch S.W. |
|---|---|---|---|---|---|---|
| Sept. 29 | 12 | -46°6 | -16°0 | +34°3 | -27s0 | 0m0 |
| | | | | | <L+7s | |

Date Wed Sept 29-30, 1937 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2552 | HD 174504 | 18 45.7 | 45 09 | I-12 | Eastman II | 010 | 15.1 | 6.54 | 7.34 | 4 | |
| 2553 | 175365 | 18 52.3 | 43 49 | " | " | " | 15.1 | 7.36 | 7 40 | 1 | |
| 2554 | 176131 | 18 53.7 | 46 37 | " | " | " | 14.8 | 7.43 | 8 33 | 2 | |
| 2555 | 191745 | 20 06.4 | 29 04 | " | " | " | 15.0 | 8.36 | 10 06 | 3 | |
| 2556 | 190603 | 20 00.7 | 31 56 | " | " | " | 15.1 | 10 09 | 10 [illegible] | 4 | |
| 2557 | 222900 | 23 39.6 | 45 49 | " | " | " | 15.2 | 10 33 | 11 47 | 1 | |
| 2558 | 874 | 00 08.0 | 16 22 | " | " | " | 15.0 | 11 50 | 00 50 | 2 | |
| 2559 | 9312 | 01 26.6 | 16 28 | " | " | " | 14.8 | 00 54 | 02 39 | 3 | |
| 2560 | 8126 | 01 15.6 | 28 13 | " | " | " | 15.0 | 02 42 | 03 12 | 4 | |
| 2561 | 27579 | 04 16.1 | 13 21 | " | " | " | 14.9 | 03 17 | 05 07 | 1 | |
| 2562 | 23728 | 03 42.3 | 43 39 | " | " | " | 15.0 | 05 12 | 05 34 | 2 | |
| | FOCUS | - | - | " | " | " | | 05 40 | - | - | |
| | | | | | | | | | | | |
| | Thurs | Sept 30 - Oct 1, 1937 | | | M-MR | | clouds and rain | | | | |
| | Fri | Oct 1 - Oct 2 1937 | | | H-MR | | clouds and rain | | | | |
| (11) | Sat | Oct 2-3/37 | H | Cloudy before visitors | | | leaving partly. Stormed | | | 6 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7-4 | W 1h 02 | 45 11 | 1 | 7.12 | $F_0$ | 1, 1, 1 | |
| 1-0 1 | W 1h 01 | 43 51 | 1 | var 4 | $M_6$ | 3 | |
| 8 - | W 1h 54 | 46 42 | 1 | 7.14 | $A_2$ | 1, 1, 1 | |
| 10 6 | W 2h 14 | 29 10 | 1 | 7.42 | $B_9$ | 1, 1, 1 | |
| 11 4 | W 2h 43 | 32 02 | 1 | 5.45 | $B_0$ | 1, 1, 1 | |
| 4 1 | W 21m | 46 01 | 2 | 7.48 | $A_0$ | 1, 1, 1 | |
| 2 | W 56m | 16 35 | 2-3 | 7.40 | $G_5$ | 1, 1, 1 | |
| 3 | W 1h 27m | 16 38 | 2-1 | 7.59 | G5 | 1, 1, 1 | |
| - | W 2h 11m | 28 24 | 2-1 | 6.60 | $K_0$ | 1, 1, 1 | |
| | W 1 06 | 13 26 | 2-1 | 7.48 | $A_5$ | 1, 1, 1 | |
| 2 | W 2 06 | 43 45 | 1 | 6.14 | $F_0$ | 1, 1, 1 | |
| - - | OUTSIDE | THROUGH | BASE | - | - | 12-8 | FOCUS = 26.28; TILT = 19.58. |

selling 4
" 7

| | | M.P. | S.C. | S.W | Watch H.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Sept 30 | 12 | -46.5 | -17.1 | -21.5 | -27.8s | -.1m |
| Oct. 1 | 12 | -46.0 | -17.5 | -17.5 Adv. 1m | -29.1s | 0.0 in |
| Oct. 4 | 12 | -44.8 | -19.4 | -16.6 | -02.8s Reset | -0.5m |

Keys to about 100 meters. Tilt at 10.00,

Date Monday Oct 4-5, 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2563 | HD 188651 | 19 51.1 | 29 56 | I-12 | Astra II | .010 | +15°.5 | 18 38 | 19 18 1 | |
| 2564 | 193819 | 20 17.2 | 13 16 | — | — | — | 15.6 | 19 21 | 21 05 2 | |
| 2565 | 215566 | 22 41.0 | 44 14 | — | — | — | 15.1 | 21 09 | 22 17 3 | |
| 2566 | 2019 | 0 19.4 | 30 49 | — | — | — | 15.2 | 22 23 | 23 23 4 | |
| 2567 | 10773 | 1 40.3 | 43 13 | — | — | — | 15.2 | 23 27 | 00 43 1 | |
| 2568 | 11336 | 01 46.4 | 44 19 | " | " | " | 15.0 | 00 46 | 02.02 2 | |
| 2569 | 16580 | 02 34.4 | 29 21 | " | " | " | 14.9 | 02 06 | 03 25 3 | |

Tuesday Oct 5-6, 1937 H-L Clouds & rain all day.
Part of burning 10 00 p.m. to
morn; cr flat fogd.

(7)

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 0 01 W | 30 01 | 1 | 6.34 | B9 | 1-1-1 | |
| 1 22 W | 13 23 | 1 | 7.37 | A0 | 1-1-1 | |
| 0 10 W | 44 26 | 2-0 | 7.02 | B9 | 1-1-1 | |
| 0 22 E | 31 01 | 1 | 6.78 | B9 | 1-1-1 | platform of dome. |
| 0 23 E | 43 23 | 2-3 | 7.40 | A0 | 1-1-1 | Haze - moisture condensing on shutters and |
| 0 50 W | 44 30 | 2-3 | 7.43 | B8 | 1-1-1 | |
| 1 25 W | 21 30 | 2-3 | 7.43 | B9 | 1-1-1 | Haze sky filling in. |

Thick at 3.55 Watch

| | | M.C. | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|
| Oct. 5 | 12 | -44.5 | +07.1 | $-03^s.6$ | $-0^m.2$ |

Put on blower + heat around main mirror Sunday a.m. Everything ~~was~~ ~~C~~.
Humidity 98%, Temp 64°, ~~too~~ much water dripping to handle to-night. Started at 11:30
Put heater on platform Tuesday night. Closed in started by 11°.

| | | | | | | |
|---|---|---|---|---|---|---|
| Oct 6 | 12 | -44.5 | -12.2 | +01.2 | $-05^s.2$ | $-0^m.6$ |

Reset

77

Date Wed Oct 6-7/37 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2570 | HD17007 | 02 38.6 | 29 03 | I·12 | Astra II | 010 | 17.8 | 1 05 | 2 3[illegible] | C1 | |

(1)

Clearing after 12. Delayed by trouble with the clamping. Seems OK now.

78

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0 38 W | [illegible] | 0 | 7.34 | $F_5$ | 1,1 | Double but not resolved accl. poor seeing. [illegible] Sold stock. |

| | | M.S. | S.C. | M.W. | WATCH M.T. | WATCH S.T. |
|---|---|---|---|---|---|---|
| Oct. 7 | 12 | −44.1 | −12.7 | +01.5 | −05.6 | −0.4 |

Date Thurs Oct 7-8, 1937 Hd-HR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2571 | HD 212075 | 22 16.6 | 13 52 | I-12 | Cutra 4 | 0.10 | 10.5 | 8.30 | 7.50 | 1 | 6h 21m |
| 2572 | 219110 | 23 08.3 | 28 54 | " | " | " | 10.5 | 9.55 | 10.35 | 2 | 0h 37m |
| 2573 | 1439 | 00 13.4 | 30 58 | " | " | " | 10.5 | 10.58 | 11.18 | 3 | 1h 7m |
| 2574 | 2942 | 00 27.6 | 27 44 | " | " | " | 10.5 | 11.21 | 12.21 | 4 | 1h 40m |
| 2575 | 19896 | 03 06.8 | 16 07 | " | " | " | 10.1 | 12 29 | 1 50 | 2 | - |
| | FOCUS | - | - | " | " | " | 10.2 | 3 40 | - | - | 0h 35m |
| 2576 | HD 33336 | 05 04.5 | 13 25 | " | " | " | 10.1 | 4 06 | 4 50 | 1 | - |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| W 21m | 14 02 | 0 | 7.02 | $A_3$ | 1, 1, 1 | Stronger on Oberon stopped. Used own Long: correction + 2m.0 |
| W 35m | 29 05 | 0 | 7.34 | $K_0$ | 1, 1, 1 | ~~Withdrawn~~ |
| E 7m | 31 11 | 0 | 5.80 | $A_0$ | 1, 1, 1 | |
| W 40m | 27 55 | 0 | 7.16 | $G_5$ | 1, 1, 1 | |
| - | 16 16 | 0 | 7.38 | $A_2$ | 1, 1, 1 | Times for this & succeeding plates are from MR's watch |
| OUTSIDE | THROUGH | BASE | - | - | 15-10 | rain (!) at 1.50, no clouds in sky. Correction: -50s |
| - | 13 27 | 0 | 7.07 | $F_2$ | 1, 2 | sorfy at 2.05; unsettled; rain at 3.30; clear 3.50. |
| | | | | | | 4.50, clouds; 5.00 SNOW! closed up. |
| | | | | | | Brilliant aurora all evening. at 10.40 |
| | | | | | | a very prominent arch 5° wide from |
| | | | | | | 70° E of N horiz to 70° W of N pt with |
| | | | | | | centre 3° below Polaris. Changing restlessly, |
| | | | | | | double at times. Later display covered nearly all sky |
| | | | | | | still visible at 3.30 |

Date Friday, Oct. 8-9, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2577 | HD 198414 | 20 45.1 | 45 05 | I-12 | Astra II | .010 | +6°.4 | 19 30 | 22 06 | 3 | 2 h W |
| 2578 | 222922 | 23 39.8 | 43 ~~22~~ 11 | — | — | — | +6.6 | 22 09 | 23 15 | 4 | |
| 2579 | 7157 | 1 68 | 61 10 | — | — | — | +6.5 | 23 21 | 0 01 | 1 | |
| 2580 | 18473 | 02 53.1 | 59 17 | — | — | — | +6.7 | 0 09 | 01 51 | 2 | |
| 2581 | 21611 | 03 24.2 | 29 42 | — | — | — | +6.3 | 01 56 | 05 21 | 3 | |
| 2582 | 47395 | 06 33.3 | 28 21 | — | — | — | +06.5 | 05 25 | 05 45 | 1 | |
| | FOCUS | — | — | — | — | — | +06.6 | 05 50 | — | — | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | H.C. S.C. S.W. M.T.W. S.T.W. |
| | | | | | | | Oct. 8 12 -44.0s -13.3s -11.4s -02.0s +0.1m |
| 12 44 3 | 2 11 W | +45 13 | 1-2 | 7.47 | Ao | 1-1-1 | Cloudy in afternoon and for sometime after sunset. clouds - image gone at 20.35. faintly visible 21.20 |
| 3 54 | 0 25 W | +43 23 | 1 | 6.82 | Ao | 1-1-1 | |
| 3 01 | 0 16 E | 61 22 | 1-2 | 6.27 | B9 | 1-1-1 | |
| 01 51 2 | 0 13 E | 59 24 | 1-2 | 7.35 | Ao | 1, 1, 1 | N component |
| 05 21 3 | 2 47 W | 29 40 | 1 | 7.51 | Ao | 1, 1, 1 | occ. clouds. image gone from 3.00 until 4.15 |
| 05 45 1 | 0 02 W | 28 17 | 1 | 5.79 | B8 | 1, 1, 1 | SETTING 5 |
| - - | OUTSIDE | THROUGH | BASE | - | - | 15-10 | FOCUS = 26.30 TILT = 19.58 " 9 |
| | | | | | | | Oct. 9 10 -41.9 -12.0 -17.0 -06.8 ±0.2m |

Date Saturday, October 9-10, 1937 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2583 | 26015 | 04 02.0 | +14 54 | I-12½ | Astra II | .010 | +05.7 | 01 05 | 01 35 | 2 | 0 33E | - |
| 2584 | 927001 | 26.1 | +14 50 | " | " | " | +05.6 | 01 42 | 01 50 | 3 | 0 8W | - |
| | " | " | " | " | " | " | " | 01 50 | 01 54 | " | 0 22W | |
| 2585 | 23838 | 03 43.1 | +44 40 | " | " | " | +05.8 | 02 10 | 02 45 | 1 | 0: 04E | - |
| | FOCUS | — | — | " | " | " | " | 03 05 | — | — | | |

(3)

Faint clouds early evening. No visitors. 84

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 01 35 2 | 01 33 E | +15 00 | 1 | 6.22 | F0 | 1, 1, 1. | Faint companion ? clouds at 01 30. |
| 01 50 3 | 01 18 W | +15 01 | 1 | 4.50 | G5 | 1, 1, 1. | setting 5 } through thick haze. |
| 02 54 | 01 22 W | " | " | " | " | 1, 1, 1. | setting 8 } |
| 02 45 | 00 04 E | +44 46 | 1 | 6.35 | G0 | 1, 2. | mostly through thick haze. image gone 02 45 |
| - | OUTSIDE | THROUGH | BASE | - | - | 15, 10. | FOCUS = 26.30 TILT = 19.58 |

85

Date Sunday Oct 10-11 1937 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2586 | HD 192715 | 20 11.2 | +15 00 | 12½" | Astra II | 0.10 | +8.0 | 6 20 | 7 10 | 2 | |
| 2587 | HD 209469 | 21 58.6 | 42 20 | " | " | " | +8.0 | 8 00 | 9 00 | 3 | |
| 2588 | HD 218538 | 23 03.7 | 28 39 | " | " | " | +7.7 | 9 05 | 10 15 | 1 | |
| 2589 | HD 224720 | 23 55.1 | 46 23 | " | " | " | +7.5 | 10 19 | 11 19 | 2 | |
| 2590 | HD 2436 | 00 23.0 | 15 54 | " | " | " | +7.7 | 11 25 | 12 20 | 3 | |
| 2591 | HD 10574 | 01 41.6 | 45 44 | " | " | " | +8.0 | 12 24 | 1 04 | 1 | |
| 2592 | HD 13596 | 02 07.6 | 14 48 | " | " | " | +7.7 | 1 09 | 1 34 | 2 | |
| 2593 | HD 17316 | 02 41.7 | 43 13 | " | " | " | +7.8 | 1 40 | 3 00 | 3 | |
| 2594 | HD 22317 | 03 30.5 | 28 54 | " | " | " | +7.9 | 3 04 | 3 40 | 1 | |
| 2595 | HD 30736 | 04 45.1 | 45 46 | " | " | " | +7.5 | 3 44 | 4 39 | 2 | |
| 2596 | HD 36468 | 05 26.6 | 43 52 | " | " | " | +7.7 | 4 42 | 5 35 | 3 | |

Thanksgiving Mon Oct 11 | 37

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|
| 0 | +15 07 | 3 | 7.19 | F0 | 1-1 | Exp to 7^10 d not get 5^m Exp + Illum tube |
| 1^m E | +42 30 | 5-2 | 7.04 | B9 | 1-1-1 | |
| 9^m W | +28 50 | 2 | 7.56 | A2 | 1-1-1 | ] |
| 23^m W | 46 36 | 2-3 | 7.31 | A2 | 1-1-1 | ] |
| 55^m W | 16 05 | 3 | 7.53 | K2 | 1-1-1 | |
| 20^m W | 45 55 | 3 | 6.74 | F5 | 1-1-1 | |
| 24^m W | 14 58 | 3 | 6.17 | K5 | 1-1-1 | Broken clouds, sky filling in |
| 1^h 16^m W | 43 21 | 2-3 | 7.53 | B9 | 1-1-1 | " " |
| 1^h 09^m W | 29 01 | 2-3 | 6.77 | A5 | 1-1-1 | |
| 51^m W | 45 51 | 2-3 | 7.19 | F8 | 1-1-1 | |
| 1^h 06 W | 43 53 | 2-3 | 7.16 | B9 | 1-1-1 | |

Date Monday Oct 11-12, 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2597 | HD 218767 | 23 5.5 | 31 57 | I-12 | Astra II | .010 | +8.0 | 22 02 | 23 20 | 1 | 1 16 |
| 2598 | 4701 | 0 49.0 | 47 13 | — | — | — | 7.9 | 23 25 | 23 54 | 2 | 0 12 W |

(2)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 23 23 | 1 16 W | 32 08 | 3 | 6·87 | B9 | 1-1-1 | Rain in afternoon and early evening. Clearing later, clouds still in south. - hazy - intermittent cloud over evening. |
| 23 [illegible] | 0 12 W | 47 25 | 2 | 7.03 | A2 | 1-1 | Haze thicker, star hidden at 23 h. hour star on L.t at 23.52. Very thick - closed dome at 24.00 |

| | | MC | SC | S.W | NITW | STW. |
|---|---|---|---|---|---|---|
| | d h | ″ | ″ | ″ | ″ | m |
| Oct 12 | 12 | -42.5 | -14.4 | -24.2 | -06.2 | -0.2 |

89

Date Tuesday, October 12-13, 1937 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Shift | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Set | Set | | | | |
| 2599 | H.D. 171654 | 18 31.0 | +46 08 | I-12 | Pol. II | +1.0 | 9.5 | 18 16 | 19 30 | 1 | |
| 2600 | 198520 | 20 47.9 | +32 28 | " | " | " | 9.8 | " 33 | 20 03 | 2 | |
| | Focus test | | | | | | 9.3 | 20 [illegible] | " | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Wed Oct 13/37 Hd. | | | | | | Temp | 4.5° | | | |
| | I-12 focus was 26.28 Tilt 19.45 | | | | | | | | | | |
| | Changed to I-25 Set Tilt 23.25 | | | | | | | | | | |
| 2600 F | Focus | | | I-25 | Contrast | 0.0 | 5.0 | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

(2)

cloudy most of day; clearing with very few

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 05 W | +46 11 | 0-1 | 6.46 | A0 | 1-1-1 | Clouds at start, started out and [illegible] |
| | 0 21 W | +32 37 | 1 | 6.23 | B5 | 1-1-1 | |
| | outside this box 10/7 | | | after | night | for RASC | [illegible] |

Clouded over solid about 16[30] just as visitors [illegible]

| | | MC | SC | SW | Watch M.T. | S.T. |
|---|---|---|---|---|---|---|
| Oct. 13 | 12 | -42.3 | -15.2 | -19.0 | -06[s].2 | -0[m].2 |

| | | | |
|---|---|---|---|
| outside this box | | 4/3 | Set 1 focus 23.4, best focus 23.4 |
| | | " | Set 2 " 23.6 |

a1

Date Wed Oct 13-14, 1937 ~~Hd~~ - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. |
|---|---|---|---|---|---|---|---|---|---|
| 2601 | HD 192715 | 20 11.2 | 15 00 | I-25 | Astra II | 010 | +5.1 | 6.52 | 8.52 1 |
| 2602 | 210334 | 22 04.6 | 45 45 | " | " | " | 5.4 | 8.58 | 10.28 2 |
| 2603 | 2453 | 00 23.3 | 61 53 | " | " | " | 5.5 | 10.34 | 11? 10.54 3 |
| 2604 | δ Cas HD5394 | 00 50.7 | 60 11 | " | Process | " | 5.5 | 12.06 | 12 [illegible] 1 |
| | | | | | | | | 12.09 | 12.13 |
| | | | | | | | | 12.14 | 12.22 |
| 2605 | 8126 | 01 15.6 | 28 13 | " | Astra II | 010 | 5.5 | 12.28 | 12.28 2 |
| 2606 | 22136 | 03 28.9 | 46 46 | " | " | " | 5.0 | 1.32 | 2.52 3 |
| 2607 | 35607 | 05 20.9 | 60 11 | " | " | " | 5.2 | 2.59 | 4.24 4 |
| 2608 | 45506 | 06 22.7 | 16 19 | " | " | " | 5.3 | 4.30 | 5.50 1 |
| | | Thurs | Oct 14/37 | Hd | | | | | |
| Changed to I-12 | | | Set for | | 26.28 | Tilt | 19.45 | | |
| 2608F | Focus Test | | | I-12 | Astra I | 010 | +2.6 | | 1 |

Cleaning after sunset.

Plate holder 4 missing

| Hour Angle End | Declination | Seeing | Ptg. Mag. | REMARKS |
|---|---|---|---|---|
| W 1h 50m | 15 08 | 0 | 7.19 $F_0$ | 3,3,3, R.A. setting very bad in one direction unusable |
| W 2h 33m | 45 26 | 1 | 7.30 $G_5$ | 3,3,3, |
| W 40m | 32 06 | 1 | 6.71 $A_0p$ | 2,2,2, |
| | 16 22 | 1 | 2 $B_0p$ | 16 } no filters setting 1 / 4 plts 7m. 8 cas about<br>8-8 } " 5 0.1 mag fainter<br>8-8 } " 9 than Polaris |
| W 40m | | | | |
| 1 22 W | 28 25 | 1 | 6.60 $K_0$ | 2,2,2, |
| 0 32 W | 46 53 | 1 | 6.74 $B_9$ | 2,2,2 Brought plate holder to me from |
| 0 12 W | 60 12 | 1 | 6.85 $A_0$ | 2,2,2 Pachuca Hosp., apparently E.K. |
| 0 38 W | 16 16 | 1 | 7.11 $G_5$ | 2,2,2 |
| | | | | Find dogs on clutch of R.A. in running order when left. |
| Entrada thru Track | | | | 9/6 Oct. 14 12 -41.9 -15.8 -14.7 MT w/ s -04.0 S.T w/ m -0.1 |

Date Thurs Oct 14-15, 1937 Std-MR Julian Day

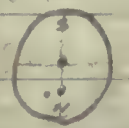
| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2609 | HD 2942 | 00 27.6 | 27 44 | I-12 | Ashá II | .010 | +3.5 | 11.15 | 11 57 | 2 | |
| 2610 | 3369 | 00 31.5 | 33 10 | I-12 | Ashá II | .010 | +3.0 | 12 03 | 12 07 | 3 | |
| 2611 | 3546 | 00 33.3 | 28 46 | I-12 | Ashá II | .010 | – | 12 11 | 12 34 | 4 | |
| 2612 | 3627 | 00 34.0 | 30 19 | I-12 | Ashá II | .010 | +03.5 | 00 39 | 00 42 | 1 | |
| – | – | – | – | – | – | – | – | 00 43 | 00 49 | 1 | |
| 2613 | 19896 | 03 06.8 | 16 07 | I-12 | Ashá II | .010 | +03.5 | 00 58 | 03 24 | 2 | |
| 2614 | 35533 | 05 20.3 | 15 35 | I-12 | Ashá II | .010 | +03.7 | 03 30 | 05 15 | 3 | |
| 2615 | 46016 | 06 25.8 | 46 34 | I-12 | Ashá II | .010 | +03.3 | 05 23 | 05 58 | 4 | |
| | FOCUS | – | – | – | – | – | +03.4 | 06 00 | – | 4 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | Tu Lg Oct 15-16, 1937 H-MR | | | | Tu Lg | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

(7)

Clouds and rain. Clearing from 10.30

94

| Reading Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 11 59 | W 45m | 27 56 | 2 | 7.16 | $G_5$ | 1, 1, 1. | K[illegible] setting very bad (both ways) |
| 12 17 | W 49 | 33 23 | 2 | 4.27 | $B_3$ | 3 | |
| 12 34 | W 1h 15m | 28 58 | 2 | 5.30 | $G_5$ | 1, 1, 1 | a few clouds |
| 00 42 | W 1 22 | 30 31 | 2 | 4.56 | $K_2$ | 1, 1, 1. | setting 5 |
| 00 49 | W 1 29 | - | - | - | - | 1, 1, 1. | setting 8 |
| 03 24 | W 1 31 | 16 18 | 2 | 7.38 | $A_2$ | 1, 1, 1 | clouds 1 20 to 2 00, 2 15 to 2 25 |
| 05 15 | W 1 09 | 15 37 | 2 | 7.48 | $A_0$ | 1, 1, 1 | - |
| 05 58 | W 0 46 | 46 32 | 2 | 6.73 | $B_8$ | 1, 1, 1 | setting 4 |
| - | OUTSIDE | THROUGH | BASE | - | - | 15, 10 | setting 8 |



Slide = 26.28 tilt = 19.58

| | | M.C. | S.C. | S.W | B.T.W. | S.T.W. |
|---|---|---|---|---|---|---|
| Oct. 15 | 12 | - 41.4 | - 16.4 | -08.4 | -02.6 | -0.1 m |

Date Saturday, Oct 16-17, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2616 | HD 193349 | 20 14.7 | 14 04 | I-12 | Astra II | .010 | +7.2° | 18 29 | 19 29 | 1 | |
| 2617 | 2358 | 00 ~~24.1~~ 23.3 | 15 29 | — | — | — | +7.1 | 22 23 | 23 25 | 2 | |
| 2618 | 7374 | 01 08.8 | 15 36 | — | — | — | +7.0 | 23 27 | 23 55 | 3 | |
| 2619 | 9100 | 01 24.5 | 17 51 | — | — | — | +07.2 | 23 57 | 00 32 | 4 | |
| 2620 | 16245 | 02 31.3 | 29 59 | — | — | — | +07.2 | 00 37 | 02 17 | 1 | |
| 2621 | 350 35 | 05 16.7 | 28 22 | — | — | — | +06.8 | 02 20 | 04 00 | 2 | |
| 2622 | 44250 | 06 15.7 | 30 01 | — | — | — | +07.3 | 04 03 | 05 13 | 3 | |
| 2623 | 44904 | 06 19.3 | 17 03 | — | — | — | +07.2 | 05 16 | 06 03 | 4 | |
| | FOCUS | — | — | — | — | — | +07.2 | 06 10 | — | 4 | |

Monday Oct 18-19, M-A

(8) Tuesday, Oct 19-20 - Mostly cloudy; thunderstorm, rain all evening. 10" - 00

| Evening Time B.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | Comp. | REMARKS |
|---|---|---|---|---|---|---|
| 7 29 | 00 36 W | +14 · 10 | 2-3 | 6·81 A0 | 1-1-1 | star looks red — took E star of bright pair. Lots of a'nt 110 visits. Showed Moon and Saturn with 2·74" Jupiter and Saturn in 4". |
| 23 25 | 00 24 W | 45 40 | 2-1 | 6·71 A5 | 1-1-1 | hazy and cloud near the horizon — general clarity |
| 23 55 | 00 08 W | +15 49 | 2 | 5·80 B8 | 1-1-1 | |
| 00 32 | 00 29 W | +18 01 | 2 | 6.02 $A_2$ | 1-1-1 | |
| 02 17 | 1 07 W | +30 08 | 2 | 7.41 A0 | 1-1-1 | |
| 04 00 | 00 05 W | +28 23 | 2 | 7.44 $A_3$ | 1-1-1 | guiding poorly. improved by stopping control clock. |
| 05 13 | 00 19 W | +29 28 | 2 | 7.06 A0 | 1-1-1 | |
| 06 | 01 06 W | +17 02 | 2 | 6.80 B9 | 1-1-1 | Setting 4 |
| - | OUTSIDE | THROUGH | BASE | - | 15-10 | setting 8 SLIDE = 26.29 TILT = 19.58 |

| | | H.C. | S.C. | S.W. | H.T.W. | S.T.W. |
|---|---|---|---|---|---|---|
| Oct. | 18 12 | -69·6 s | -20·0 s | +03·0 | -01·6 s | -0·1 m |
| | 19 12 | -68.4 | -18·0 | +07·8 | -02·9 s | -0·1 m |

Wed Oct 20-21 — Cloudy.

Date Thursday – Oct 21-22, 1937 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2624 | HD 17891 | 2 47.3 | 46 44 | I – 12 | Astra II | .010 | +7°.3 | 00 35 | 01 55 | / |
| 2625 | HD 26171 | 4 03.4 | 13 08 | I – 12 | Astra II | .010 | – | 02 02 | * | 2 |
| | FOCUS | – | – | I – 12 | Astra II | .010 | +07.2 | 02 50 | – | – |

Friday – October 22-23, 1937 – H, MR, – Clouds & Rain

Sat - Oct 23-24 10 Visitors (complimentary) MR showed Telescope. Cloudy

22 more visitors (uncomplimentary)

Sunday - Cloudy -

Cloudy all day and first half of night Partially cleared at 11.30, clouded up again Cleared 12.30

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | MC SC SW NTW STW |
| 0 48 W | 46 55 | 0-0 | 6.71 | B9 | 1, 1, 1, | Oct 20d 12h -10.4s -18.9s +09.3s -04.6s -0.1m |
| - | 13 13 | 1 | 6.00 | B9 | 1, 2 | 21 12 -68.1 -19.3 +15.1 -05.8s -0.2m |
| OUTSIDE | THROUGH | BASE | - | - | 14-10 | SLIDE=26.28, TILT 19.58. |

* clouded up soon after start. Take ending as 02h 08m

| | MC | SC | SW | NTW | STW |
|---|---|---|---|---|---|
| Oct 22d 12h | -67.5s | -19.9s | +21.1s | -06.2s | -0.2m |
| Oct 25 12 | -66.1 | -21.1 | -21.5 Adv. 1m | +02.8s | -00.0m Reset (stopped) |

99

Date Monday Oct 25-26, 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2626 | H.D. 193707 | 20 16.6 | 14 48 | I-12 | Agfa II | .010 | +5°.1 | 18 10 | 18 48 | 1 | |
| 2627 | 194211 | 20 19.3 | 15 43 | — | — | — | 5.2 | 18 49 | 19 27 | 3 | |
| 2628 | 210646 | 22 6.7 | 27 14 | — | — | — | 5.2 | 19 30 | 20 16 | 4 | |
| 2629 | 218097 | 23 0.2 | 32 50 | — | — | — | 5.2 | 20 20 | 21 24 | 1 | |
| ~~2630~~ | ~~16594~~ | ~~2 34.5~~ | ~~31 53~~ | — | — | — | ~~5.1~~ | ~~23 47~~ | | 2 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| [illegible] | 0 28 W | 14 55 | 5 | 6.56 | A0 | 1-1-1 | Clouds till sunset - clear all N. Still light clouds around, image ☆ at 1830. Haze and almost, poor still hazy. seeing variable. |
| [illegible] | 1 35 W | 15 51 | 5-2 | 6.68 | B9 | 1-1-1 | |
| 21 13 | 0 16 W | 27 26 | 4 | 7.07 | A0 | 1-1-1 | |
| 21 29 | 0 20 W | 33 03 | 3 | (7.28) | A0 | 1-1-1 | took N comfort. thick cumulus at 21.15 generally thick till after 23.30 the clearing in zenith. Still hazy down to total horizon. |
| | | 32 03 | 2 | 7.56 | A2 | 1- | Checking ☆ at 12.00 to 12.10 |
| | | | | | | | Oct 26 12 $-1^m 13^s.1$ ~~+02.9~~ -18.8 -13.3 $+02^s.9$ $-0^m.1$ |

**Date** Tuesday October 26-27, 1937 H-L **Julian Day**

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2630 | HD 206963 | 21 40.6 | +46 24 | I-12 | Ilford II | 2.0 | +7.5 | 20 05 | 20 55 | 3 |
| 2631 | 220102 | 23 16.0 | +59 44 | " | " | " | +7.6 | 20 59 | | 4 |
| | Wed Oct 27-28 Hd | | | Cloudy. | | | | | | |

Clouds all day; slowly clearing in early evening



| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 15 W | +46 35 | 1-2 | 7.04 | F5 | 1-1-1 | Light clouds during first part. |
| | +59 55 | 2 | 7.00 | F2 | 1- | Clouds; star last night at 21$^{02}$ — |
| | | | | | | Completely cloudy 21$^{55}$ — 22$^{00}$ Used up. |

| | | | H.C. | S.C. | S.W. | Watch B.T. | Watch S.T. |
|---|---|---|---|---|---|---|---|
| Oct. 27 | 12 | -1$^{m}$ | 05$^{s}$.2 | -21$^{s}$.6 | -30$^{s}$.6 | +02$^{s}$.0 | +0$^{m}$.1 |
| 28 | 12 | -1 | 04.4 | -21.8 | -23.6 | +00$^{s}$.8 | +0$^{m}$.1 |

103

Date ~~Tues~~ Thurs Oct 28-29, 1937 A.M. M.R. Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2631 | HD3369 | 00 31.5 | 33 10 | I-12 | Ortho | 010 | 4.5 | 10 57 | 11 03 | 1 | 6h40m |
| 2632 | 35-46 | 00 33.3 | 28 46 | " | " | " | 5.0 | 11 06 | 11 18 | 2 | 6h54m |
| 2633 | 3127 | 00 34.0 | 30 19 | " | " | " | 5.0 | 11 21 | 11 30 | 3 | 7h05m |
| 2634 | 9709 | 01 30.0 | 46 36 | " | " | 4 | 4.5 | 11 46 | 01 16 | 4 | 7h51m |
| 2635 | 22963 | 03 36.1 | 32 38 | " | " | " | 4.8 | 01 20 | 02 30 | 1 | 9h02m |
| 2636 | 35238 | 05 18.2 | 31 08 | " | " | " | 4.4 | 02 34 | 03 44 | 2 | 10h34m |
| 2637 | 46016 | 06 25.8 | 46 34 | " | " | " | 4.8 | 03 51 | 04 41 | 3 | 11h24m |
| 2638 | 60383 | 07 29.1 | 28 51 | " | " | " | 4.5 | 04 46 | 05 56 | 4 | 12h32m |
| | FOCUS | - | - | " | " | " | 4.7 | 06 00 | - | | |

(6)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | 38°F REMARKS |
|---|---|---|---|---|---|---|---|
| | W 40m | 33 22 | 0 | 4.27 | $B_3$ | 3 | Trip mess. Gear |
| | W 54m | 28 57 | 0 | 5.30 | $G_5$ | 1, 1, 1 | |
| | W 1 05 | 30 30 | 0 | 4.56 | $K_2$ | 3 | ← Some refined both ways. Found relay sticking. |
| | W 1 54 | 46 48 | 1 | 7.00 | $B_9$ | 1, 1, 1 | |
| | W 1 02 | 32 45 | 1-2 | 7.17 | $F_8$ | 1, 1, 1, | |
| | W 0 34 | 31 09 | 1 | 7.37 | $K_0$ | 1, 1, 1, | |
| | W 0 24 | 46 30 | 2 | 6.73 | $B_8$ | 1, 1, 1 | ← ✓ slight haze occasional clouds. setting 4 setting 8 |
| | W 0 36 | 28 46 | 2 | 7.10 | $A_3$ | 1, 1, 1, | |
| | OUTSIDE | THROUGH | BASE | - | - | 14, 10 | SLIDE = 26.29 TILT = 19.57 |

Watch

| | | H.C. m s | S.C. s | S.W. s | M.T. s | S.T. m |
|---|---|---|---|---|---|---|
| Oct. 29 | 13 | -1 04.1 | -22.3 | -17.1 | +0 46 | +0.1 |

Date Friday, Oct 29-30, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2639 | Daylight Mars | — | — | I-12 | Astra II | .060 | | | | 4 |
| | | | | | | | (wind 7.8) | | | |
| 2639 | HD 1243 | 00 11.6 | 13 22 | I-12½ | Astra II | .010 | +8°.0 | 22 14 | 24 29 | 1 |
| 2640 | 26171 | 04 03.4 | 13 08 | " | " | " | 8.5 | 00 47 | 01 22 | 2 |
| 2641 | 34547 | 05 13.2 | 13 29 | " | " | " | 8.7 | 01 28 | 03 13 | 3 |
| 2642 | 44738 | 06 18.3 | 14 10 | " | " | " | 9.2 | 03 17 | 04 37 | 1 |
| 2643 | 68903 | 08 09.4 | 16 23 | " | " | " | 9.3 | 04 46 | 05 28 | 2 |
| 2644 | 70338 | 08 ~~18.2~~ 16.3 | 13 57 | " | " | " | 9.3 | 05 32 | 06 12 | 1 |
| | FOCUS | — | — | " | " | " | 9.4 | 06 15 | — | " |

(6)

clearing at sunset. reversed telescope.

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | 50°F — Set on Jupiter - setting in rapidly at 18.15. removed thick. about 120 visitors from Hamilton. Demonstrated telescope. Clearing at 21.45. |
| W 02 30 | 13 33 | 1 | 7.58 | A3 | 1-1-1 | still quite hazy; numbered 2691 by mistake, renumbered 2639; |
| E 0 29 | 13 15 | 0 | 6.00 | B9 | 1-1-1 | blew dec. fuses; very hazy at start, clear later; |
| W 0 13 | 13 30 | 2 | 7.5 | B9 | 1-1-1 | plate holder 4 broken again; high wind; |
| W 0 32 | 14 07 | 2 | 7.3 | A0p | 1-1-1 | |
| E 0 28 | 16 16 | 3 | 7.13 | B8 | 1-1-1 | too windy to work west. |
| W 0 09 | 13 47 | 3+ | 7.14 | $A_2$ | 1-1-1 | selling 4 |
| OUTSIDE | THROUGH | BASE | - | - | 14-10 | SLIDE = 26.29 TILT = 19.59 selling 8 |

| | | | N.C. | S.C. | S.W. | Wated M.T. | Wated S.T. |
|---|---|---|---|---|---|---|---|
| Oct. 30 | 10 | -1 | 03.4 | -22.4 | -13.6 | +02.0$^s$ | +0.1$^m$ |

**Date** Saturday, October 30-31, 1937 P H.M.R **Julian Day** 304

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Set | Set | | | |
| 2645 | HD 172 187 | 18 33.7 | +43 08 | I -12 | Astr II | 010 | + 10.5 | 17 45 | 18 35 | 2 |
| 2646 | 198820 | 20 47.9 | +32 ~~38~~ 23 | " | " | " | +10.5 | 15 29 | 19 14 | 5 |
| 2647 | 201196 | 21 02.9 | +15 16 | " | " | " | +10.6 | 19 18 | 20 18 | 1 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 2645 | HD 1641 | 00 15.6 | -32 25 | " | " | " | +10.4 | 22 30 | 23 16 | 2 |
| 2649 | 10096 | 01 33.5 | -45 23 | | | | +10.5 | 0 10 | 01 10 | 3 |
| 2650 | 16111 | 02 30.2 | +28 58 | " | " | " | +10.5 | 01 15 | 02 15 | 1 |
| 2651 | 20536 | 03 13.1 | +61 38 | " | " | " | +10.5 | 02 30 | 03 10 | 2 |
| 2652 | 44033 | 06 14.4 | +14 41 | " | " | " | +10.3 | 03 18 | 04 06 | 3 |
| 2653 | 47270 | 06 32.7 | +44 06 | " | " | " | +10.3 | 04 12 | 05 30 | 1 |
| 2654 | 77692 | 08 55.0 | +54 45 | " | " | " | +10.2 | 05 38 | 06 10 | 2 |
| | FOCUS | - | - | " | " | " | +10.4 | 06 15 | - | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +38°F REMARKS |
|---|---|---|---|---|---|---|
| h m | | | | | | |
| 2 19 W | +43 10 | 0 | 6.40 | A5 | 1, 1, 1 | Very strong wind, [illegible] hard to keep star on slit. |
| 2 42 W | +32 36 | 1 | 6.23 | B5 | 1, 1, 1 | |
| 3 W | +15 24 | 1 | 7.52 | K0 | 1, 1, 1 | |
| About 75 mins. | | Cloud | 61 Cygni and Reg Nebula. Poland Man left Flash from [illegible] with Cloud | | | |
| 47 W | +22 26 | 1 | 7.40 | F5 | 1, 1, 1 | Flash cloud at start. Cloud [illegible] of light rain |
| 53 W | [illegible] | 1 | 7.40 | F5 | 1, 1, 1 | big fire (barn?) in south |
| 02 W | +29 07 | 2 | 7.05 | B8 | 1, 1, 1 | |
| 13 W | +61 46 | 2- | 6.60 | B8 | 1, 1, 1 | Blew lee fuses again |
| 09 W | +14 09 | 2- | 7.20 | K5 | 1, 1, 1 | * cloud 506 to 522 |
| 14 W | +44 03 | 2 | 7.51 | K0 | 1, 1, 1 | occasional clouds. rain again, ceased. |
| 32 E | +59 33 | 2 | 6.19 | A2 | 1, 1, 1 | " " |
| OUTSIDE | THROUGH | BASE | — | — | 14-10 | SLIDE = 26.29 TILT = 19.58 |

1937

Date Sunday Oct 31 - Nov 1 Y - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle East |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Watch Time | | |
| 2655 | HD 198151 | 20 43.3 | 46 10 | I - 12 | Agfa II | 010 | +5.3 | 5 58 | 6 58 | 2 |
| 2656 | HD 201433 | 21 044 | 29 48 | " | " | " | +5.0 | 7 05 | 7 27 | 3 |
| 2657 | HD 201433 | " | " | " | " | " | +5.0 | 7 29 | 7 59 | 3 |
| 2658 | HD 218043 | 22 598 | 30 45 | " | " | " | +5.5 | 8 06 | 9 26 | 1 |
| 2659 | HD 219291 | 23 096 | 29 13 | " | " | " | +5.4 | 9 29 | 10 29 | 2 |
| 2660 | HD 10588 | 01 382 | 31 43 | " | " | " | +5.3 | 10 35 | 11 45 | 3 |
| 2661 | HD 17656 | 02 450 | 46 25 | " | " | " | +5.3 | 11 49 | 12 35 | 1 |
| 2662 | HD 22124 | 03 288 | 31 41 | " | " | " | +5.4 | 12 41 | 02 00 | 2 |
| | ~~HD 30736~~ | 04 451 | 45 46 | " | " | " | +5.2 | 02 04 | | 3 |

Sun spots 30[S]. New photos for sunstone. 1st two photos had been spotted, might improve



| Ending Time P.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | 39[m] W | 46 18 | 1 | 6.32 | A2 | 1-1-1 | Rubbed mirror a little. Watch stopped (reset) 1 hr slow by mistake |
| | 42[m] W | 29 48 | 1 | 5.57 | A0 | 1-1-1 | setting 6 This has been corrected in readings recorded. Minutes are watch time. |
| | 1[h] 14[m] W | " | 1 | 5.57 | A0 | 1-1-1 | setting 2 |
| | 47[m] W | 30 58 | 1 | 7.12 | F2 | 1-1-1 | |
| | 1[h] 41[m] W | 29 25 | 1-2 | 6.84 | F5 | 1-1-1 | |
| | 27[m] W | 31 52 | 1-2 | 7.20 | G5 | 1-1-1 | |
| | 10[m] W | 46 34 | 1-2 | 6.75 | G5 | 1-1-1 | |
| | 52[m] W | 31 48 | 1-2 | 6.90 | F0 | 1-1-1 | Clouds at 1.10 - 1.30 intermittent clouds. Filled in suddenly at 2.10. Still cloudy cleared at 3.00. |
| | ~~45 50~~ | | 1-2 | 7.19 | F8 | 1-- | |

Watch

| | | S.E. | S.S. | S.W. | |
|---|---|---|---|---|---|
| Nov. 14 | | -1[m] 02[s].4 | -24.0 | -09[s].8 | +1[m] 01[s].2 +1[m].3 |
| | Reset 4: at 14[h] 05[m] | | | +01.2 | +0.6 |

Date Sunday Nov 1-2, 1937, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| - 2663 | Jupiter — | 1937 19 31.5 | -22° 15' | I-12 | Astra IIB | .060 | +5.5 | 17 43 | — | 1 | |
| | Mars — | 1937 19 40.0 | -23° 24' | — | — | — | | | | | |
| | | | | | | | | — | 18 03 | | |
| 2664 | HD. 194115 | 20 18.7 | 15 03 | — | Astra II | .010 | +6.5 | 18 13 | 20 15 | 3 | |
| | | | | | | | (wet bulb 6.0) | | | | |
| 2665 | 218428 | 23 2.9 | 29 31 | — | — | — | +6.2 | 20 22 | 22 18 | 2 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 2666 | 10407 | 1 36.4 | 29 01 | — | — | — | +6.1 | 22 25 | 23.59 | 3 | |
| 2667 | 16594 | 02 34.5 | 31 53 | " | " | " | +6.1 | 00 04 | 01.49 | 1 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |
| (5) | | | | | | | | | | | |

Plate 25 a on 2664 with bright light.
" 25 a on 2663 " ft. light from trolley
" 45 a on all other " " light

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| - 1 | | | | | | | Setting on Plate 25 Eff. 20 2 Plate Setting -.8 |
| | | | | | | | A 40 0 |
| | | | | | | | A 80 +.5 |
| | | | | | | | B 20 1.0 |
| | | | | | | | B 40 1.5 |
| | | | | | | | C 20 2.0 |
| | | | | | | | C 40 2.5 |
| | | | | | | | C 80 3.0 |
| | | | | | | | C 100 3.5 |
| | | | | | | | C 60 4.0 |
| 17 03 | | | | | | | Filter 38A - Plate 15 sec Strip 130 sec (60 with 70 without) |
| 17 23 | 2 | 20 W | +15 10 | 1 | 7.09 | A0 | 1-1-1 Next slide seems to begin at plate reading 2.0 some temp 417 Turned off heat for a while Image seemed ft. & rg. affected again A.20, improving slightly later Image seemed out of focus at 19.10 |
| 17 18 2 | 1 | 40 W | +29 43 | 1 | 7.23 | B9 | 1-1-1 Found a bit difficult in grinding. Discovered that screw in R.A. setting motion was loose thus catching or missing and slipping. Tightened screw in place as well as possible. Lost the last part of the last run on this star. |
| 17 | 0 | 47 W | 29 10 | 2 | 7.44 | A2 | 1-1-1 Tightened R.A setting again |
| 17 | 1 | 34 W | 32 02 | 2 | 7.56 | A2 | 1-1-1 Haze. Light clouds + lightning flashes in N.W. Heavy fall of rain at 1.40 |

| | | MC | S.C. | B.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| | | m s | s | s | s | m |
| Nov. 2 | 16 | -1 00.4 | -23.0 | -05.0 | +01.6 | -0.4 |
| | | | | | Reset | |
| Nov. 3 | 12 | -0 59.6 | -23.3 | -01.1 | +01.0 | -0.1 |

Date Thurs Nov 4-5, 1937 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2668 | HD 219634 | 23 12.2 | 61 25 | I-12 | Astra II | .010 | 5.5 | 9 21 | 10 11 | 2 | W1h34 |
| 2669 | " | " | " | " | " | " | 6.0 | 10 11 | 11 57 | 3 | W2h21 |
| 2670 | " | " | " | " | " | " | 6.0 | 11 57 | 11 39 | 1 | W3h04 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 2671 | H.D. 27579 | 04 16.1 | 13 21 | I-12 | Astra II | .010 | 5.7 | 01 34 | 02 15: | 2 | W0h36 |
| | FOCUS | - | - | - | - | - | 5.6 | 3 15 | - | - | OUTSIDE |

Clouding at unset. Cleared 6.30 Clouded again partly clearing 9.00.



| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +35°F REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | watch M.C. S.C. S.W. M.T. S.T. |
| 10.11 | W1h34 | 61 3L | 1 | 6.44 | B8 | 1,1,1 | Nov. 4 12 -58.7 -23.5 +06.5 +0.2 -0.2 |
| 11.51 | W2h21 | " " | 1 | " | " | 1,1,1 | |
| 1.31 | W3h04 | " " | 1 | " | " | 1,1,1 | Spotter not available Put new batteries on heater relay. Thick at 11.25 Cable that end. |
| 2.42 | W0h36 | 13 26 | 2 | 7.48 | A5 | 1, 2, | Cleared temporarily at 12.30 and again at 1.30 |
| - | OUTSIDE | THROUGH | BASE | - | - | 14,10 | becoming hazy after 2.10. Thick at 3. (5.5) |
| | | | | | | | SLIDE = 26.29 TILT = 19.59 (30) |
| | | | | | | | M.C S.C S.W. M.T. S.T. |
| | | | | | | | Nov. 5 12 -57.9 -23.7 +09.1 -01.6 -0.2 |

Date Friday, 1937 November 5-6. H.MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature beg. | Temperature mid. | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2672 | H.D. 46031 | 06 25.9 | 15 58 | I-12½ | Astra II | .010 | 4.4 | 4.4 | 04 04 | 04 48 | 1 | W 03 |
| 2673 | 56200 | 07 11.0 | 16 18 | " | " | " | 4.2 | 4.0 | 04 51 | 06 16 | 2 | W 46 |
| | FOCUS | - | - | " | " | " | 4.0 | | 06 20 | - | " | |

(2)

clouds and rain all day and evening, clearing about 3.30. 116

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | Conf. | +35°F. | REMARKS | |
|---|---|---|---|---|---|---|---|---|
| 04 -3 | W 1 03 | 15 56 | 1 | 6.51 A5 | 1-/-1 | | | |
| 06 16 2 | W 1 46 | 16 14 | 1-2 | 7.25 F5 | 1-/-1 | occasional clouds near end. | | S 5 |
| - | OUTSIDE | THROUGH | BASE | - - | 14-11 | SLIDE = 26.28 TILT = 19.59 | | S 9 |

| | H.C. | S.C. | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|
| Nov. 6 10 | -57'3 | -23'9 | +16·5 | -01·7 s | -0·2 m |

Date Saturday, Nov 6-7, 1937, M-MR Julian Day

Spectrograph was at +3° when closed at 16:30. Left to 4° at moment it was 5°.

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2674 | HD 198915 | 20 48.5 | 46 21 | I-12 | astra II | .010 | +5.0 | 17 55 | 18 57 | 1 | |
| 2675 | 208835 | 21 53.9 | 46 23 | — | — | — | +4.7 | 18 59 | 21 29 | 2 | |
| | | | | | | | | | | | |
| 2676 | 4701 | 00 44.0 | 47 13 | — | — | — | +5.0 | 21 32 | 22 46 | 3 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 2677 | 35173 | 05 17.8 | 15 55 | — | — | — | +5.3, +5.3 | 00 55 | 01 47 | 1 | |
| 2678 | 43496 | 06 11.4 | 15 53 | — | — | — | +5.2, +4.8 | 01 51 | 03 01 | 2 | |
| 2679 | 47050 | 06 31.6 | 30 58 | — | — | — | +5.0, +4.9 | 03 04 | 04 14 | 3 | |
| 2680 | 47255 | 06 32.6 | 31 51 | — | — | — | +4.7, | 04 16 | 04 30: | 1 | |
| | FOCUS | — | — | — | — | — | | 05 30 | — | — | |

(7)

All fields 45s with ft. light

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | +38°F | REMARKS |
|---|---|---|---|---|---|---|---|
| 1 17 | 0 53W | 46 30 | 3 | 7.28 | B9 | 1-1-1 | A few light clouds when started |
| 2 15 2 | 2 20W | 46 33 | 3 | 7.39 | A0 | 1-1-1 | R.A. setting slated, stepping differential. Dec. worked slated set to. far to left. Loosened Dec. moved slated and mounting to right. Lost 20 to 25 minutes on Plate 2675 O.K. now. Guide star change from 19.45 on first image reflected by |
| 22 42 | | 47 25 | 2 | 7.03 | A2 | 1-1 | Clear at start - Watch again to get out 10 min. manual track. Called 21.44. |
| | | | | | | | Closed down at 23.45 |
| 0 47 | 0 46 E | 15 57 | 2-3 | 6.89 | B0 | 1-1-1 | br. east comp.) Opened up again at 00 40 |
| 1 32 | 0 26 E | 15 50 | 2-3 | 7.16 | B9 | 1-1-1 | |
| 21 47 | 0 26 W | 30 55 | 3 | 7.29 | $A_2$ | 1-1-1 | |
| 21 11 | 0 42 W | 31 48 | 3: | 7.31 | $A_0$ | 1-2 | haze soon after start. Only two stars visible at 5 20 |
| - | OUTSIDE | THROUGH | BASE | - | - | 14-11 | SLIDE = 26.28 TILT = 19.59 |

1937

Date Sunday Nov 7-8 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Filt | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| # 2681 | H.D 216608 | 22 49.2 | 44 18 | I-12 | astra II | 010 | 9.5-9.5 | 7 43 | 8 43 | 2 |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| (1) | | | | | | | | | | |

Hour Angle End

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | 44 25 | 3 | 5.62 | Ao | 1-1- | Seeing good but very Muck. |

| | | H.S. | S.C. | S.W. | Watch H.T. S.T. |
|---|---|---|---|---|---|
| ~~Nov.~~ 8 | 12 | -55·3 | -24·5 | +30·5 | - -0m·2 |
| Nov. 9 | 12 | -54·8 | -25·4 | +34·8 | +04s·2 -0m·1 Reset. |

1937

Date Sunday November 9-10 U-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2682 | H.D. 199055 | 20 49.5 | +31 15 | I-12 | 2-m II | 2-m 010 | +6.3° | 18 45 | 19 45 | 3 | | |
| 2683 | 210594 | 22 06.3 | +30 04 | " | " | " | +6.0 | 19 48 | 20 23 | 1 | | |
| 2684 | 220102 | 23 16.0 | +59 44 | " | " | " | +6.1 | 20 29 | 21 28 | 2 | | |
| 2685 | 221237 | 23 25.2 | +58 01 | " | " | " | +6.0° | 21 31 | 22 31 | 3 | | |
| 2686 | 5459 | 00 51.3 | +61 53 | " | " | " | +6.0 | 22 34 | 0 04 | 1 | | |
| 2687 | 16111 | 02 36.2 | +29 58 | " | " | " | +6.0 | 0 09 | 1 04 | 2 | | |
| 2688 | 23838 | 03 43.1 | +44 40 | " | " | " | +5.9 | 1 09 | 1 31 | 3 | | |
| 2689 | 26015 | 04 02.0 | +14 54 | " | " | " | +6.2 | 1 35 | 1 57 | 1 | | |
| 2690 | 34762 | 05 14.7 | +27 51 | " | " | " | +6.0 | 2 01 | 2 36 | 2 | | |
| 2691 | 47270 | 06 32.7 | +44 06 | " | " | " | +5.9 | 3 20 | 4 20 | 3 | | |
| 2692 | 75523 | 08 45.4 | +45 41 | " | " | " | +6.0 | 4 25 | 5 05 | 1 | | |
| 2693 | 80634 | 09 15.9 | +13 33 | " | " | " | +6.0 | 5 11 | 6 21 | 2 | | |

New position clutch for R.A. setting has been installed, 2 hours lost this evening due to completing of installation.



| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 52 W | -31 23 | 1 | 7.04 | A5 | 1-1-1 | Finder light not on, reflected with [illegible] on spider |
| 1 12 W | +30 14 | 1 | 6.52 | A5 | 1-1-1 | |
| 1 08 W | +59 55 | 2 | 7.00 | F2 | 1-1-1 | |
| 2 12 W | +58 12 | 3 | 7.06 | A0 | 1-1-1 | Clouds - stars lost 10 min. |
| 2 08 W | -6 06 | 3 | 7.40 | G5 | 1-1-1 | Clouds - stars frequently lost. Collimation 23m9 |
| 1 30 W | +29 08 | 3 | 7.05 | J3 | 1-1-1 | |
| 0 44 W | +44 46 | 2 | 6.35 | G0 | 1-1-1 | |
| 0 31 W | +14 59 | 2 | 6.22 | F0 | 1-1-1 | |
| 0 18 W | +17 33 | 2 | 6.28 | B4 | 1-1-1 | sky falling & at end of exp. |
| 0 44 W | +44 03 | 2 | 7.51 | K0 | 1-1-1 | clearing again late. |
| 0 44 E | +45 32 | 2 | 7.08 | K0 | 1-1-1 | |
| 0 02 W | +13 22 | 2 | 7.00 | F5 | 1-1-1 | hazy & wide dawn. |

| | | M.C. | S.C | S.W. | Watch M.T. | S.T. |
|---|---|---|---|---|---|---|
| Nov. 10 | 12 | -53.8 | -25.4 | +39.6 | +04h8 | -0m0 |

Date Wed Thurs 10-11, 1937 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature (beginning) | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2694 | HD 219634 | 23 12.2 | 61 25 | I-12 | Eastman II | 010 | +4.7 | 5 45 | 6 27 | 3 | |
| 2695 | " | " | " | " | | | 4.9 | 6 27 | 7 07 | 1 | |
| 2696 | 208394 | 21 50.9 | 47 44 | " | " | " | 4.6 | 7 12 | 8 32 | 2 | |
| 2697 | 219634 | 23 12.2 | 61 25 | " | " | " | 4.9 | 8 37 | 9 21 | 3 | |
| 2698 | " | " | " | " | " | " | 5.0 | 9 21 | 10 01 | 1 | |
| 2699 | 886 | 00 08.1 | 14 38 | " | " | " | 4.7 | 10 07 | 10 17 | 2 | |
| | | | | | | | | 10 04 | 10 10 | | |
| | | | | | | | | 10 11 | 10 13 | | |
| 2700 | 1439 | 00 13.4 | 30 58 | " | " | " | 5.0 | 10 17 | 10 37 | 3 | |
| 2701 | 219634 | 23 12.2 | 61 25 | " | " | " | 4.8 | 10 42 | 11 22 | 1 | |
| 2702 | " | " | " | " | " | " | 4.9 | 11 22 | 12 | 2 | |
| 2703 | 46016 | 06 25.8 | 46 34 | " | " | " | 4.9 | 12 24 | 1 24 | 1 | |
| 2704 | 50315 | 06 47.6 | 43 04 | " | " | " | 4.8 | 1 28 | 2 33 | 2 | |
| 2705 | 45721 | 06 24.0 | 28 17 | " | " | " | 4.6 | 2 42 | 3 32 | 3 | |
| 2706 | 43043 | 06 09.0 | 16 04 | " | " | " | 4.6 | 3 35 | 4 39 | 1 | |
| 2707 | 57728 | 07 17.4 | 15 33 | " | " | " | 4.8 | 4 42 | 5 42 | 2 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | E 1h45 | 61 36 | 2 | 6.44 | $B_8$ | 1, 1, 1 | Clutch working perfectly. |
| | E 1h05 | " | 2 | " | " | 1, 1, 1 | |
| | W 1h42 | 47 55 | 1 | 7.41 | $A_2$ | 1, 1, 1 | |
| | W 1h10 | 61 37 | 1 | 6.44 | $B_8$ | 1, 1, 1 | Very Light |
| | W 1h49 | " | 1 | " | " | 1, 1, 1 | |
| | | | 1 | 2.68 | $B_2$ | 3 | Set 1 |
| | | | 1 | " | | 3 | " 4 |
| | W 1h05 | 14 50 | 1 | " | | 3 | " 9 Wind blowing. |
| | W 1h20 | 31 10 | 1 | 5.80 | $A_0$ | 1, 1, 1 | |
| | W 3h10 | 61 38 | 2 | 6.44 | $B_8$ | 1, 1, 1 | |
| | 3.54 W | " | 2 | " | " | 1, 1, 1 | Clutch "equated" time. |
| | 2.02 E | 46 36 | 2-1 | 6.73 | $B_9$ | 1-1-1 | |
| | 1.10 E | 43 00 | 2-1 | 7.35 | $A_3$ | 1-1-1 | |
| | 0 08 W | 28 15 | 2 | 6.91 | $A_2$ | 1-1-1 | |
| | 1 30 W | 16 03 | 2-1 | 7.51 | $G_5$ | 1-1-1 | |
| | 1 26 W | 15 28 | 2-1 | 7.49 | $G_5$ | 1-1-1 | |

125

Date Wed. Mar. 10-11 1937 9hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2708 | 73593 | 08 34.1 | 46 11 | I-12½ | Astra II | 0.10 | +4.6 | 5.46 | 6.11 | 3 | |

(15)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 6 11 ? | 0 37 W | 46 03 | 1 | 6.52 | Ko | 1-1-1 | |

| | | M.C. | S.C. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| | | s | s | s | s | m |
| Nov. 11 | 12 | -52.5 | -25.3 | +42.3 | +06.4 | -0.0 |

No corrections on last plate.

127

Date Thursday Nov 11-12, 37 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2708 F. | | | Zest for comparison spectrum. | | | | | | | 3 |
| 2709 | HD 199206 | 20 50.6 | 44 44 | I-12 | Astra II | .010 | +2°6 | 17 50 | 19 56 | 1 |
| 2710 | 224166 | 23 50.6 | 45 48 | — | — | — | +2.5 | 20 01 | 21 21 | 2 |
| 2711 | 10773 | 1 40.3 | 43 13 | — | — | — | +2.9 | 21 23 | 23 13 | 3 |
| 2712 | 15992 | 2 29.1 | 44 12 | — | — | — | +2.9 | 23 15 | 01 00 | 1 |
| 2713 | 4:044 P | 06 09.0 | 14 38 | — | — | — | +3.0, +2.9 | 01 09 | 02 50 | 2 |
| 2714 | 43044 F | " | " | — | — | — | +3.0, +3.0 | 02 51 | 04 31 | 3 |
| 2715 | 47255 | 06 32 6 | 31 51 | — | — | — | +3.0, +2.5 | 04 35 | 05 55 | 1 |
| 2716 | 80064 | 09 12.5 | 11 55 | — | — | — | +2.7, +2.8 | 05 59 | 06 33 | 2 |
| | FOCUS | — | — | — | — | — | +2.9 | 06 37 | — | — |
| | | | Friday Nov. 12- Removed slit, and [illegible] adjusting mechanism. H. | | | | | | | |
| 2716F. | Frau [illegible] | | | I-12 | I=40 | 010 | | 10 30 | | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +27°F REMARKS |
|---|---|---|---|---|---|---|
| | Not in two ordinary comparison to test | | | | 12 2 4 2 | Developed plate 1½ m in full strength D19 comp. seemed O.K. |
| 2 10 W | +44 52 | 0 | 7.40 | B9 | ½-1½-1½ | |
| 5 35 W | 46 01 | 0 | 6.82 | B9 | 1-1-1 | |
| 3 37 W | 43 22 | 0 | 7.40 | A0 | 1-1-1 | |
| 1 35 W | 44 21 | 1, 2 | 7.40 | B9 | 1-1-1 | |
| 0 15 E | 14 36 | 2 | 6.80* | B9 | 1-1-1 | * double Ink free. comp. (left). |
| 1 27 W | " | 2 | " | " | 1-1-1 | Ink fld. comp. (right). |
| 2 27 W | 31 49 | 2 | 7.31 | A0 | 1-1-1 | |
| 0 25 W | 11 45 | 2 | 6.29 | A0 | 1-1-1 | S4 |
| OUTSIDE | THROUGH | BASE | - | - | 14-11 | SLIDE = 26.29 TILT = 19.59 S9 |
| | | | | | | MC SC SW. HT ST. |
| | | | | | | Noon. 12 12 -52.6 -26.5 +49.2 +06s 8m - 00 |
| | | | | | | collimator 16.5 |
| a.t. | thro' [illegible] | | | | 15/11 | slide 26.29 tilt 19.6 |
| | | | | | | (not readings) |

Date Fri. Nov 12-13, 1937 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature beginning | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2717 | HD 219634 | 23 12.2 | 61 25 | I-12 | Cramer II | 010 | +2.7 | 6 40 | 7.32 | 1 | {32m |
| | | | Sat, 1937 Nov. 13-14. H-MR | | | | clouds and heavy f.g. | | | | |
| | | | Mon, Nov 15-16. 1937 | | clouds and rain | | | M-L | | | |
| Wed Nov 17-18/37, Hd, Clearing partly at 7.30. Clouds again. | | | | | | | | See over | | | |

| Ending Time B.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 3 1 | E 32m | 61 36 | 2 | 6.44 | $B_8$ | 1,1,1 | Thinning in zenith at 6.30. Thick again 7.30 |
| | | | | | | | Closed 9.00 |
| | | | | | | | Cloud and heavy rain |

| | | | | | | | M.S.T. Watch | S.T. |
|---|---|---|---|---|---|---|---|---|
| Nov. 13 | 10 | -50.9 | -25.7 | +55.5 | +07.5 | +0.0 | m | |
| Nov. 15 | 12 | -49.4 | -26.1 | +65.7 | +03.8 | +0.0 | s | m |
| Nov. 16 | 12 | -48.7 | -26.5 | +10.3 | +02.2 | +0.0 | s | m |
| Nov. 17 | 12 | -47.8 | -26.7 | +15.7 | +00.6 | -0.1 | add 1 m | m |
| Nov. 18 | 12 | -46.0 | -26.9 | +28.3 | -07.0 | -0.2 | s | m |

Date Wed Nov 17-18, 1937 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature beginning | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2718 | HD 33266 | 05 03.9 | 61 44 | I-12 ~~2-4~~ | Astra I | 010 | +2.4 | 11 12 | 11 38 | 2 | {2 07 |
| 2719 | 35-607 | 05 20.9 | 60 11 | " | " | " | 2.1 | 11 41 | — | 3 | - |
| | | Thurs, | 1937 Nov | 18-19, Hd-MR; thick haze, clear + 4 in about ½ hour | | | | | | | in. |
| | | Fri, | 1937 Nov | 19-20, M-MR; clouds | | | | | | | |

Clear at 10.45

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 1352 | E 2 00 | 61 45 | 1 | 5.99 | $A_0$ | 1,1,1 | |
| " | — | 60 12 | | 6.85 | $A_0$ | 1,1,1 | Thickening from 12.00 on. Set at 12.20. Waited until 12.45 no sign of clearing so closed shde. |
| | | | | | | | Closed up at 2.30 still thick. |
| 1411 | Ditto. | | | | | | |

| | | MC | S.C. | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|---|
| Nov. 19 | 12 | -46·8 | -26·8 | +20·8 | -05ʰ 8 | -0ᵐ 2 |
| Nov. 20 | 10 | -45·2ˢ | -27·1ˢ | +34·3ˢ | -05ʰ 2ˢ | -0ᵐ 2 |

Date Saturday, Nov 20-21, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2720 | HD 215242 | 22 38.7 | 46 38 | I-12 | Astra II | .010 | +0°.3 | 18 39 | 19 19 | 1 | 3.9W |
| 2721 | 217587 | 22 56.7 | 43 39 | — | — | — | +0.5 | 19 21 | 20 31 | 2 | 3W |
| 2722 | 9996 | 1 32.5 | 44 54 | — | — | — | +0.1 | 20 34 | 21 14 | 3 | 40E |
| 2723 | 11336 | 1 96.4 | 44 19 | — | — | — | +0.4 | 21 15 | 22 49 | 1 | 42W |
| 2724 | 17891 | 2 47.3 | 46 44 | — | — | — | +0.3 | 22 51 | 23 41 | 2 | 33W |
| 2725 | 35035 | 5 16.7 | 28 22 | — | — | — | +0.5 | 23 45 | 01 35 | 3 | 03E |
| 2726 | 43049? | 6 09.0 | 14 38 | — | — | — | +0.0 | 01 41 | 02 30: | 1 | 21W |
| | FOCUS | — | — | — | — | — | +0.1 | 04 00 | — | — | |

(7)

Cloudy at sunset, snow. Cleared later.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0 19 W | 46 50 | 3 | 6.40 | B9 | 1-1-1 | |
| | 13 W | 43 51 | 3 | 7.33 | A3 | 1-1-1 | |
| | 40 E | 45 05 | 3-4 | 6.34 | A0 | 1-1-1 | slight haze |
| | 42 W | 44 30 | 3 | 7.43 | B8 | 1-1-1 | light clouds getting |
| | 33 W | 46 55 | 3 | 6.71 | B9 | 1-1-1 | clearing again |
| | 03 E | 28 24 | 3 | 7.44 | A3 | 1-1-1 | hazing up 0 45; clear again 1 15 |
| | 01 W | 14 35 | 4 | (6.80) | B9 | 1-2 | (double) frec. comp. (left) occlouds |
| | OUTSIDE | THROUGH | BASE | - | - | 14-12 | mostly cloudy after 2 30. solid at 2 50. closed 4 00 |

SLIDE = 26.29 TILT = 19.59

Sunday opened up - just found first star 5½ when it clouded.

135

1937

Date Sunday Nov 21-22 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2727 | HD 21062 | 3 18.8 | 28 48 | I-17 | Ashl I | 010 | -3.8 | 11 37 | 12 37 | 1 | 32W |
| 2728 | HD 31069 | 04 47.7 | 43 54 | " | " | " | -3.0 | 12 44 | 1 14 | 2 | 19W |
| 2729 | HD 50315 | 06 47.6 | 43 04 | " | " | " | -2.9 | 1 19 | 2 19 | 3 | 46E |
| 2730 | 45721 | 06 24.0 | 28 17 | " | " | " | -3.0 | 2 23 | 3 13 | 1 | 32W |
| 2731 | 43043 | 06 09.0 | 16 04 | " | " | " | -2.8 | 3 19 | 4 29 | 2 | 34W |
| 2732 | 57728 | 07 17.4 | 15 33 | " | " | " | -2.8 | 4 32 | 5 37 | 3 | 04W |
| 2733 | 89993 | 10 18.1 | 30 07 | " | " | " | -3.0 | 5 41 | 6 31 | 1 | 03E |

(7)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1.02 W | + 28 25 | 1 | 6.99 | $A_0$ | 1-1-1 | cleared about 11- clouded over call man 12.00 |
| | 0.09 W | + 43 57 | 1-2 | 5.96 | $B_9$ | 1-1-1 | |
| | 0.46 E | + 43 01 | 1-2 | 7.35 | $A_3$ | 1-1-1 | For Dr Friend. |
| | 0 32 W | + 28 14 | 1-2 | 6.91 | $A_2$ | 1-1-1 | " " " |
| | 2 04 W | + 16 03 | 1 | 7.51 | $G_5$ | 1-1-1 | " " " |
| | 2 04 W | + 15 29 | 1 | 7.49 | $G_5$ | 1-1-1 | " " " |
| | 0 03 E | + 29 55 | 1 | 7.46 | $K_0$ | 1-1-1 | " " " |

| | | M.C. | S.C. | S W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Nov. 22 | 12 | -1.49 | -27.1 | +45.4 | -10.7 s | -0.3 m |

137

Date Monday Nov 22-23, 1937, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2734 | HD 10681 | 1 39.2 | 27 58 | I-12 | Astra II | .010 | -3°3 | 21 52 | 22 42 | 2 |
| 2735 | 16580 | 2 34.4 | 29 21 | — | — | — | -3.4 | 22 44 | 00 04 | 3 |
| 2736 | 35173 | 5 17.8 | 15 55 | " | " | " | -3.0 | 00 10 | [illegible] | 1 |
| 2737 | 43496 | 06 11.4 | 15 53 | " | " | " | -3.5 | 03 11 | 04 05 | 2 |
| 2738 | 44250 | 06 15.7 | 30 01 | " | " | " | -3.2 | 04 10 | 05 05 | 3 |
| | | | | | | | | | | |
| | Tuesday Nov 23-24, 1937 | | | | Cloudy H | | | | | |
| | Wed Nov 24-25, 1937 | | | | Cloudy | | | | | |
| | Thurs Nov 25 H Changed to I-25 | | | | | | | | | |
| | I-12 focus was 26.28 Tilt 19.5 | | | | | | | | | |
| 2738F | Focus Test | | | I-25 | Astra II | .010 | 3.2 | | | M |

(5)

cloudy for first part of evening
cleared gradually - still some haze
at 22h

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2 42 2 | 0 50 W | 28 08 | 6 | 7.31 | A0 | 1-1-1 | |
| | 1 16 W | 29 30 | 4-3 | 7.43 | B9 | 1-1-1 | clouds and haze gradually clearing |
| | 0 [illegible] E | 15 59 | 3-4 | 6.89 | B8 | 1-1-1 | Power off from 1.30 to 3.00 |
| 4 05 2 | 1 41 W | 15 52 | 3-2 | 7.16 | B9 | 1-1-1 | |
| | 2 37 W | 29 59 | 3-2 | 7.06 | A0 | 1-1-1 | clouds and haze 4.50<br>Clear at 5.30. |

| | S.E. | S.W. | Watch M.T. S.T. |
|---|---|---|---|
| Nov. 23 12 | -12m 7s.2 | -07.9 Add 2m | -08s.8 -0m.3 |
| Nov. 24 12 | -40.2 -1m 27.0 | | -09s.6 -0m.2 |
| Nov. 25 12 | -40.2 -1m 28.0 | -48.6 | -11s.0 -0m.3 |

Good outside 4/3

Focus 23.4 Tube 23.25

Focus 23.3 would be better. Set 23.30.

Date Thurs Nov 25-26, 1937 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature beginning | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2739 | HD 212442 | 22 19.2 | 14 46 | I-25" | Astra II | 0.10 M | +4.9 | 5:42 | 6.52 | 1 | 1h 31m |
| 2740 | 219110 | 23 08.3 | 28 54 | " | " | 0.10 M | 5.1 | 6:56 | 8 06 | 2 | 1h 56m |
| 2741 | HD 4394 | 00 50.7 | 60 11 | " | Protex | 0.10 | 5.1 | 8 12 | 8 15 | 1 | |
| | | | | | | | | 8 16 | 8 46* | | 56m |

Friday, 1937 Nov 26, MR

Changed to I-12½; I-25 slide was 2333; 111 was 233

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2741 F1 | FOCUS | - | - | I-12½ | Astra II | .010 | +5.8: | OUTSIDE THROUGH BASE | TILT=196 | | |

| Ending Time G.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | W 31m | 14 5-8 | 4 → 2 | 6.73 | $A_0$ | 3, 3, 3 | Twilight, wires badly out of adjustment. long time to find stars |
| | W 56m | 29 05- | 3 | 7.34 | $K_0$ | 3, 3, 3 no plotting | Clouds 7.46 - 7.54 |
| | | 60 22 | 3 | 2 | Bop | ~~8, 8~~ | Set 1 ♂ Cas same mag as α and β Cas |
| | E 6m | " | 3 | | | 8, 8 | " 5- Shots 7m call end 8.20* |
| | | | | | | | ~~" 9~~ |
| | | | | | | | Thick at 8.20 closed 9.45- |
| | | | | | | | rain and heavy mist |

| | | M.C. | S.C. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Nov. 26 | P2 | -38°.0 | -27'.5 | -38.5 | -12s.0 | -0m.3 |

| | | | | | |
|---|---|---|---|---|---|
| SLIDE = | 26.40 | SETTING 2 | | 14-12 | slide 26.30 best; left it there. |
| " | 26.20 | " 4 | | 14-12 | |
| " | 26.10 | " 6 | | 14-12 | |
| " | 26.30 | " 9 | | 14-12 | |

Date Friday, November 26-27 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| – 2742 | HD 206155 | 21 35.1 | +08 44 | I-12 | Astro II | 0.10 | +7.2 | 17 20 | 18 40 | 3 | |
| | ~~21+4432~~ | 22 11.9 | +27 18 | " | " | " | | | | | |
| | ~~1606~~ | 10 15.2 | +30 23 | " | " | " | +7.2 | 19 44 | | | |
| 2743 | HD 25473 | 03 57.7 | +73 18 | " | " | " | +06.8 | 0 20 | 01 10 | 2 | |
| 2744 | HD 34762 | 05 14.7 | +27 51 | " | " | " | +06.5 | 01 18 | 02 03 | 1 | |
| 2745 | HD 35076 | 05 17.0 | +28 51 | " | " | " | +06.3 | 02 08 | 02 40 | 3 | |
| 2746 | HD 35239 | 05 18.2 | +31 03 | " | " | " | +06.0 | 02 43 | 03 03 | 2 | |
| 2747 | HD 56200 | 07 11.0 | +16 18 | " | " | " | +06.4 | 03 06 | 04 04 | 3 | |
| 2748 | HD 60335 | 07 28.9 | +43 15 | " | " | " | +06.0 | 04 10 | 04 40 | 1 | |
| 2749 | HD 63630 | 07 44.8 | +46 12 | " | " | " | +06.4 | 04 44 | 05 14 | 2 | |
| 2750 | HD 79554 | 09 09.7 | +15 22 | " | " | " | +06.1 | 05 18 | 05 25 | 3 | |
| | FOCUS | – | – | " | " | " | +06.4 | 05 55 | – | | |

(7) Last day Nov 27-28, H-MR fog and light rain, took last plate around midnight at 2.2 30. Rain increasing for all night

Clouds all day; thinning end of afternoon.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +40°F REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 07 W | +03 53 | 6- | 6.8-7.5 | A0 | 1-1-1 | Hazed clouds; star frequently lost. Solid $18^{35}$ |
| | | | | 7.43 | K0 | | |
| | | | | 5.77 | B8 | | Clouds right at start. |
| | | | | | | | Closed up $20^{h}$. |
| | 1 13 W | +73 23 | 5 | 7.30 | F5 | 1-1-1 | occ. haze. |
| | 0 51 W | +27 52 | 3 | 6.28 | B9 | 1-1-1 | |
| | 1 26 W | +28 51 | 3 | 6.37 | B9 | 1-1-1 | |
| | 1 48 W | +31 05 | 3 | 5.91 | B9 | 1-1-1 | |
| | 0 56 W | +16 15 | 3 | 7.25 | F5 | 1-1-1 | |
| | 1 14 W | +43 09 | 3 | 6.58 | F0 | 1-1-1 | |
| | 1 32 W | +46 05 | 3 | 6.61 | A3 | 1-1-1 | |
| | 0 19 W | +15 11 | 3 | 7.18 | K0 | 1-2 | haze at start; thick 5 25; heavy mist |
| | OUTSIDE | THROUGH | BASE | - | - | 14-13 | SLIDE = 26.30 TILT = 19.6 |

Put heat on mirror, as well as lower.

| | H.S. | S.S. | E.W. | H.T. | S.T. |
|---|---|---|---|---|---|
| Nov. 27 12 | -37.0 | -1 27.2 | -32.0 | -12.0 | -0.3 |

Date Monday Nov 29-30 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2751 | HD 20458 | 3 12.4 | 13 29 | I-12 | 2 Tri-X | .010 | -3.0° | 22 39 | 00 39 | 1 | 1h W |
| 2752 | " 35036 | 5 16.7 | 16 01 | " | " | " | -2.5 | 00 44 | 02 04 | 2 | 0h W |
| 2753 | " 44766 | 6 18.5 | 29 46 | " | " | " | -2.7 | 02 09 | 03 00 | 3 | 0.5h W |
| 2754 | " 47395 | 6 33.3 | 28 21 | " | " | " | -2.5 | 03 04 | 03 34 | 1 | 0.5h W |
| 2755 | " 49949 | 6 45.8 | 44 58 | " | " | " | -2.8 | 03 38 | 04 26 | 2 | 0.5h W |
| 2756 | " 91:81 | 10 26.5 | 44 43 | " | " | " | -2.6 | 04 35 | 06 25 | 3 | 1.5h W |

mostly cloudy for first part of evening
with occasional breaks in clouds.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 42 W | +13 37 | 1 | 7.42 | A0 | 1-1-1 | slight auroral glow in N |
| | 1 02 W | +16 02 | 0-1 | 7.38 | A0 | 1-1-1 | wind increasing image unsteady |
| | 0 56 W | +29 44 | 1 | 6.50 | B9 | 1-1-1 | broken clouds |
| | 1 15 W | +28 18 | 1 | 5.79 | B8 | 1-1-1 | " " |
| | 1 55 W | +44 54 | 1 | 6.24 | A5 | 1-1-1 | " " |
| | 0 14 W | +44 28 | 1 | 7.56 | A5 | 1-1-1 | |

| | | M.C. | S.C. | S.W. | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| Nov. 29 | 12 | -35.1 | -1m27.3s | -17.3s | -17.5s | -0m4 |
| Nov. 30 | 12 | -34.4 | -1 27.7 | -13.7 | -18.2s | -0m4 |

145

1937

Date Tuesday November 30-December 1 H-J Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2757 | HD. 9616 | 01 29.2 | +32 37 | I-12 | Astra II | Set 010 | -3.5 | 23 18 | 23 13 | 1 | |
| 2758 | " 25473 | 03 57.7 | +73 18 | " | " | " | -3.7 | 23 19 | 00 19 | 2 | |
| 2759 | " 34762 | 05 19.7 | +27 51 | " | " | " | -3.7 | 00 25 | 01 00 | 1 | |
| 2760 | " 35076 | 05 17.0 | +28 51 | " | " | " | -3.4 | 01 03 | 01 33 | 2 | |
| 2761 | " 35984 | 05 23.4 | +29 07 | " | " | " | -3.5 | 01 35 | 02 10 | 3 | |
| 2762 | " 44033 | 06 14.4 | +14 41 | " | " | " | -3.6 | 02 13 | 02 58 | 1 | |
| 2763 | " 56200 | 07 11.0 | +16 18 | " | " | " | -3.5 | 03 01 | 04 01 | 2 | |
| 2764 | " 75523 | 08 45.4 | +45 41 | " | " | " | -3.5 | 04 06 | 04 41 | 3 | |
| 2765 | " 63630 | 07 44.8 | +46 12 | " | " | " | -3.6 | 04 44 | 05 19 | 1 | |
| 2766 | " 80654 | 09 15.9 | +13 33 | " | " | " | -3.5 | 05 23 | 06 23 | 2 | |
| | " 98354 | 11 13.7 | +14 49 | " | " | " | | | | 3 | |

(10)

Cloudy most of day + evening.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 23 | 2 02 W | +32 46 | 2 | 7.13 | G0 | 1-1-1 | Cirrus during early part of exposure. Wind. |
| | 0 38 W | +73 23 | 2 | 7.30 | F5 | 1-1-1 | Bright aurora |
| 00 | 0 04 W | +27 53 | 2 | 6.28 | B9 | 1-1-1 | |
| 33 | 0 34 W | +28 53 | 2 | 6.37 | B9 | 1-1-1 | |
| 10 | 1 05 W | +29 08 | 2 | 6.66 | F5 | 1-1-1 | |
| 56 | 1 03 W | +14 40 | 2 | 7.20 | K5 | 1-1-1 | |
| | 1 09 W | +16 15 | 2 | 7.25 | F5 | 1-1-1 | |
| 41 | 0 14 W | +45 33 | 2 | 7.08 | K0 | 1-1-1 | |
| 19 | 1 53 W | +46 05 | 2 | 6.61 | A3 | 1-1-1 | |
| 2 | 1 25 W | +13 22 | 2 | 7.00 | F5 | 1-1-1 | sky falling in about 5.35 sky hazy during remainder of exposure. |
| | | | | 7.21 | G0 | | |

| | | M.C. | S.C. | D.W. | Watch H.W. | Watch S.W. |
|---|---|---|---|---|---|---|
| Dec. 1 | 12 | -26.9 | -1m 27.4 | -08.3 | -19.0 | -0.4 |

147

Date Wed. Dec 1-2, 1937 Hd - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature beginning | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2767 | HD 212075 | 22 16.6 | 13 52 | 1-12 | Eastman II | 010 | -3.0 | 7 19 | 8 23 | 3 | W 2½ |
| 2768 | 10638 | 01 38.7 | 32 01 | " | " | " | -3.0 | 9 29 | 10 09 | 1 | W 42 |
| 2769 | 19896 | 03 06.8 | 16 07 | " | " | " | -3.2 | 10 13 | 11 13 | 2 | W 29 |
| 2770 | 27579 | 04 16.1 | 13 21 | " | " | " | -3.3 | 11 16 | 12 03 | | |

(4)

Clouds darkening

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 33 | W 2h 28 | 14 02 | 4→2 | 7.02 | $H_3$ | 1, 1, 1. | Clouds nearly all the time. Thick 8.20 → |
| 10 01 | W 42m | 32 12 | 3→5 | 6.86 | $A_3$ | 1, 1, 1 | |
| 11 13 | W 29m | 16 16 | 5 | 7.38 | $A_2$ | 1, 1, 1 | |
| 2 01 | W 09m | 13 26 | — | 7.48 | $A_5$ | 1, 1½ | sky falling in from 11.45 on, star gone at 12.03. Stayed cloudy so closed up at 2.30. |

| | | MC | SC | SW | MT. ST. |
|---|---|---|---|---|---|
| Dec. 2 | 12 | −3s.6 | −1m 27s.3 | +0s.4 | −19s.1 −04m |

Date Thursday, Dec 2-3, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2771 | HD 202644 | 21 12.1 | 13 32 | I-12 | Astra II | .010 | +0°.2 | 17.28 | 19 18 | 1 | 32W |
| 2772 | 21847.2 | 23 3.2 | 30 55 | — | — | — | -0.4 | 19.21 | 20 31 | 2 | 54W |
| 2773 | 2411 | 0 22.8 | 17 21 | — | — | — | -0.8 | 20 34 | 21 26 | 3 | 29W |
| 2774 | 16245 | 2 31.3 | 29 59 | — | — | — | -0.6 | 21.29 | 22 59 | 1 | 59W |
| 2775 | 34054 | 5 9.5 | 14 56 | — | — | — | -0.7 | 23 03 | 00 13 | 2 | 30E |
| 2776 | 43583 | 06 11.9 | 14 05 | — | — | — | -0.8 | 00 16 | 00 46 | 1 | 30E |
| 2777 | 44738 | 06 18.3 | 14 10 | — | — | — | -0.4 | 00 49 | 02 10 | 3 | 17W |
| 2778 | 44901 | 06 19.3 | 17 03 | — | — | — | -0.6 | 02 13 | 02 53 | 1 | 00W |
| 2779 | SS 283 | 07 07.2 | 15 21 | — | — | — | -0.5 | 02 58 | 05 08 | 2 | 28W |
| 2780 | 68903 | 08 09.4 | 16 23 | — | — | — | -0.7 | 05 12 | 06 29 | 3 | 57W |
| 2781 | 100808 | 11 31.0 | 28 20 | — | — | — | -0.5 | 06 33 | 06 55 | 1 | 9E |
| | FOCUS | — | — | — | — | — | | 07 00 | — | — | 30E |

(11)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +24° F REMARKS |
|---|---|---|---|---|---|---|---|
| | 32 W | +13 41 | 2-1 | 7.37 | B8 | 1-1-1 | Considerable trouble with vert. slide sticking on pier. Tightened by tightening spring. |
| | 54 W | 31 06 | 2 | 7.34 | A2 | 1-1-1 | |
| | 29 W | 17 33 | 3-2 | 6.68 | Mb | 1-1-1 | |
| | 54 W | 30 07 | 3 | 7.41 | A0 | 1-1-1 | |
| | 30 E | 14 58 | 3 | 7.27 | B9 | 1-1-1 | |
| | 00 E | 14 05 | 3 | 6.46 | B9 | 1-1-1 | |
| | 17 W | 14 07 | 3-2 | 7.3 | A0p | 1-1-1 | |
| | 00 W | 17 01 | 3 | 6.80 | B9 | 1-1-1 | |
| | 28 W | 15 15 | 3 | (7.39) | A0 | 1-1-1 | N component brighter. clouds near end. clouds 6.10. |
| | 47 W | 16 15 | 3 | 7.13 | B8 | 1-1-1 | |
| | 09 E | 28 05 | 3 | 5.90 | A3 | 1-1-1 | S4 |
| - | OUTSIDE | THROUGH | BASE | - | - | 14-13 | SLIDE : 26.30 TILT • 19.6 S9 |

| | H.E. | S.E | S.W | M.T. S | S.T. m |
|---|---|---|---|---|---|
| Dec. 3 12 | -30.3 | -1 27.1 | -19.1 | -15.8 | -0.3 |

151

Date Sunday December 3-4, 1927 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2782 | HD 201196 | 21 02.9 | +15 16 | I-12 | ~~2 Ex. II~~ | 010 | −2.0 | 17 20 | 18 10 | 2 | |
| 2783 | 210461 | 22 05.5 | +14 07 | " | " | " | +2.3 | 18 14 | 19 04 | 3 | |
| 2784 | 222386 | 23 35.0 | +74 43 | " | " | " | +2.2 | [illegible] | [illegible] | 1 | |
| 2785 | 222396 | " | " | " | " | " | +2.2 | 20 03 | 20 23 | 2 | |
| 2786 | 222587 | 23 50.0 | +73 25 | " | " | " | +2.1 | 20 26 | 21 [illegible] | 3 | |
| 2787 | [illegible] | 0 18.5 | +17 17 | | | | +2.2 | 21 06 | 22 36 | 1 | |
| | 70086 | 01 33.5 | +45 23 | | | | | 22 20 | | | |

Schindler 1937 December 4-5, Hd-MR - Sunday.

6

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 38 W | +15 24 | 4 | 7.52 | K0 | 1-1-1 | Light clouds |
| | 1 28 W | +14 18 | 4 | 7.41 | K0 | 1-1-1 | |
| | 1 W | +74 56 | 3 | 6.10 | F2 | 1-1 | Thick haze, star gone 11[m] 20[s] |
| | 1 W | +74 56 | 3 | 6.10 | F2 | 1-1-1 | |
| | 1 56 W | +73 39 | 3 | 6.56 | G5 | 1-1-1 | Some haze |
| | 1 39 W | -17 24 | 3 | 7.09 | F0 | -1- | Thick haze star out 5 p, |
| | | | | 7.44 | G5 | | |
| | | | | | | | Cloud up 0[m] 30[s] |
| | | | | | | | clouds and snow. |

| | MC | SC | SW | HT | ST |
|---|---|---|---|---|---|
| Dec. 4 12 | -29° 1 | -1[m] 27[s].1 | -19.1 | -15[s].8 | -0[m].4 |
| Dec. 6 12 | -27.1 | -1 27.5 | -28.5 (adv 1m) | -19.1 | -0.5 |
| Dec. 7 12 | -26.3 | -1 27.8 | -18.2 | -21.1 | -0.5 |
| Dec. 8 12 | -25.4 | -1 28.0 | -10.0 | -22.0 | -0.5 |

Date Wed Dec 8-9, 1937, Hd - MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~2787~~ | ~~HD 212500~~ | ~~22 19.6~~ | ~~14 48~~ | ~~I - 12~~ | ~~Astra II~~ | ~~010~~ | ~~-4.5~~ | | | 2 | |
| 2788 | HD 22136 | 03 28.9 | 46 46 | I - 12 | Astra II | 010 | -4.2 | 9.58 | 10 36 | 2 | |
| 2789 | HD 106926 | 12 12.7 | +15 42 | I - 12½ | Astra II | 1010 | -07.7 | 5 45 | 7 03 | 3 | |
| | FOCUS | - | - | - | - | - | -08.0 | 7 05 | - | - | |

Thurs, Dec 9-10, 1937 Hd - MR Cloudy.

Delayed by trouble with dome opening and dec. gear sticking. Both seem OK now.
Later: Both giving trouble again.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +11°F | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | | | 7.47 | $F_2$ | | | Cloudy, |
| 1936 2 | 4m E | 46 54 | 1 | 6.74 | $B_9$ | 1, 2 | | – Practically no light they unworkable, wind dangerously high, no cloud up 11.05– |
| | | | | | | | | |
| 33 3 | 0h 18m E | +15 29 | 2 | 7.53 | $K_0$ | 1-1-1 | | opened 3 30: clouds |
| – | OUTSIDE | THROUGH | BASE | – | – | 14-13 | | Uncertain later, thin clouds most of Time |
| | | | | | | | | SLIDE = 26.30 TILT = 19.6 |

found it impossible to move thermostat indicator from its position at -07.7 C, so left it there.

| | | M.C. | S.C. | S.W | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Dec. 9 | 12 | -24.3s | -1m 28.1s | -02.9 | -19.8s | -0.4m |
| Dec. 10 | 12 | -23.7 | -1 28.4 | +04.3 | -26.0 | -0.6 |

Date Friday December 10-11, 1937 M.L. Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2790 | HD 45180 | 6 20.9 | 15 35 | I - 12½ | Astra II | .010 | Set -8.8 | 2 47 | 4 01 | 1 | 2.79 W |
| 2791 | " 84107 | 09 37.7 | 30 27 | " | " | " | -8.7 | 4 05 | 4 43 | 2 | 0.62 W |

Partially clear at 12.00, filling in again, and slowly clearing until 2.00. 156

| Reading Time E.S.T. | | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 4 31 | 1 | 2 39 W | 15 34 | 0-1 | 6.69 | B9 | 1-1-1 | |
| 4 45 | 2 | 0 05 W | 30 16 | 0-1 | 5.79 | A2 | 1-1-1 | On supplementary list sky filling again. |

| | | HC | SC | SW | Watch HT | Watch ST |
|---|---|---|---|---|---|---|
| | | ° | ′ ″ | ° | s | m |
| Dec. 11 | 12 | -22.3 | -1 28.2 | +14.3 | -27.0 | -0 |

157

Date Saturday, December 11-12, 1937, H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2792 | HD 206330 | 21 36.3 | +42 49 | I-12 | Astro II | Set 010 | -7.2 | 17 25 | 18 00 | 3 | |
| 2793 | 222386 | 23 35.0 | +74 43 | " | " | " | -7.2 | 18 06 | 18 34 | 1 | |
| 2794 | 370 | 00 03.3 | +73 41 | " | " | " | -7.0 | 19 37 | 19 52 | 2 | |
| 2795 | 224098 | 23 50.0 | +73 ~~42~~ 51 | " | " | " | -7.3 | 19 57 | 20 27 | 3 | |
| 2796 | 10086 | 01 33.5 | +45 23 | " | " | " | -7.5 | 20 32 | 21 17 | 1 | |
| 2797 | 16111 | 02 30.2 | +28 58 | " | " | " | -7.0 | 21 21 | 22 11 | 2 | |
| 2798 | 19526 | 03 03.5 | +60 15 | " | " | " | -7.2 | 22 15 | 23 25 | 3 | |
| 2799 | 25473 | 03 57.7 | +73 18 | " | " | " | -7.3 | 23 29 | 0 19 | 1 | |
| 2800 | 31662 | 04 52.6 | +60 56 | " | " | " | -7.3 | 0 27 | 0 52 | 2 | |
| 2801 | 35076 | 05 17.0 | +28 51 | " | " | " | -7.5 | 0 59 | 1 34 | 1 | |
| 2802 | 42050 | 06 31.6 | +30 58 | " | " | " | -7.5 | 1 38 | 2 58 | 3 | |
| 2803 | 73190 | 08 32.0 | +73 31 | " | " | " | -7.2 | 3 06 | 4 20 | 1 | |
| | FOCUS | - | - | " | " | " | -7.5 | 4 45 | - | - | |
| 2804 | 79569 | 09 09.7 | +15 22 | " | " | " | -7.3 | 5 16 | 5 48 | 2 | |
| 2805 | 86354 | 10 12.4 | +14 49 | " | " | " | -7.6 | 5 56 | 7 06 | 1 | |

(14)

clouds and snow flurries most of day and almost till dark.

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +13°F | REMARKS |
|---|---|---|---|---|---|---|---|
| 1 25 W | +42 59 | 2 | 6.53 | K5 | 1-1-1 | clouds almost from start. | |
| 0 00 | +74 56 | 2 | 6.10 | A2 | 1-1-1 | Light clouds. | |
| 0 51 W | +73 51 | 3-4 | 7.42 | A0 | 1-1-1 | light clouds. | |
| 1 31 W | +74 04 | 3-4 | 6.55 | B9 | 1-1-1 | | |
| 0 48 W | +45 34 | 3-4 | 7.44 | G5 | 1-1-1 | | |
| 0 42 W | +29 08 | 4 | 7.05 | B8 | 1-1-1 | | changed focus here from 26.30 to 26.27 |
| 1 22 W | +60 23 | 3 | 7.26 | A0 | 1-1-1 | | |
| 1 21 W | +73 23 | 3-4 | 7.30 | F5 | 1-1-1 | Trouble: (a) Differential in control clock motion has become jammed. Shut off control clock (b) See quick notes, when focus wide, effect we're having a bad time, is very slow. | |
| 1 00 W | +60 59 | 3 | 6.54 | F5 | 1-1-1 | | |
| 1 19 W | +28 51 | 2 | 6.37 | B9 | 1-1-1 | | |
| 1 28 W | +30 56 | 2 | 7.29 | A2 | 1-1-1 | M 1 | |
| 0 49 W | +73 22 | 2-1 | 6.93 | A0 | 1-1-1 | sky full dim stars & reflections. | |
| OUTSIDE | THROUGH | HAZE | — | — | 15-15 | SLIDE 26.27 TILT 196 | |
| 1 41 W | +15 11 | 3 | 7.18 | K0 | 1-1-1 | clearing, warm, about 5 05 | |
| 0 55 W | +14 25 | 3 | 7.21 | G0 | 1-1-1 | seems to be [illegible] | |

159

1937

Date Sunday Dec 12-13 Y·L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2806 | HD 27349 | 4 13 9 | +31 44 | I-12 | Ilford | 010 | -7.0 | 10 20 | 00 50 | 3 |
| 2807 | " 36468 | 5 25.8 | +43 52 | " | " | " | -7.1 | 00 56 | 03 21 | 1 |
| 2808 | " 68461 | 8 07 4 | +16 49 | " | " | " | -7.3 | 03 29 | 04 59 | 2 |
| 2809 | " 92371 | 10 34.8 | +28 02 | " | " | " | -7.1 | 05 17 | 06 57 | 3 |

Clear in morning - cloudy 3 on Snow 8
light snow falling from about 2 on

160

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 41 W | 31 48 | P | 7.53 | K5 | 1-1-1 | very poor seeing, voltage stood at 130!! |
| 3 00 W | 43 53 | O | 7.16 | B9 | 1-1-1 | guide off from about 1.50 - 2.25 |
| 1 58 W | 16 48 | O | 6.90 | $G_6$ | 1-1-1 | |
| 1 34 W | 27 49 | O | 6.99 | $A_2$ | 1-1-1 | on supplementary list. |

Differential gear taken off & covered
Seems ok. RKL

| | | M.S. | S.C. | S.W. | M.T. S.T. |
|---|---|---|---|---|---|
| Dec. 13 | 12 | -19.8$^s$ | -1$^m$ 28.1$^s$ | +31.9 | -21.6$^s$ -0.5$^m$ |

Date Monday Dec 13-14, 1937, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2810 | HD 218767 | 23 5.5 | 31 57 | I-12 | Astro II | .010 | −9.2 | 17 26 | 18 36 | 1 |
| 2811 | 3 | 00 0.0 | 44 40 | — | — | — | −7.7 | 18 40 | 19 24 | 2 |
| 2812 | 2019 | 0 19.4 | 30 49 | — | — | — | −8.0 | 19 29 | 20 19 | 3 |
| 2813 | 11188 | 1 44.9 | 46 58 | — | — | — | −8.8 | 20 24 | 21 32 | 1 |
| 2814 | 21611 | 3 24.2 | 29 42 | — | — | — | −9.4 | 21 36 | 23 12 | 2 |
| 2815 | 34547 | 5 13.2 | 13 29 | — | — | — | −9.5 | 23 17 | 00 47 | 3 |
| 2816 | " 43044 | 06 09.0 | 14 38 | " | " | " | −8.5 | 00 51 | 01 50 | 1 |
| 2817 | " 47050 | 06 31.6 | 30 58 | " | " | " | −8.7 | 02 52 | 04 18 | 2 |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 0 40W | 32 09 | 2 | 6.87 | B9 | 1-1-1 | temp went to -7.2 set to -9.5 dome temp +14° F. |
| 0 39W | 44 53 | 2-3 | 6.51 | A0 | 1-1-1 | Dec clamp sticking a little. |
| 1 09W | 31 02 | 2 | 6.78 | B9 | 1-1-1 | |
| 0 51W | 47 07 | 3 | 7.09 | B8 | 1-1-1 | set temp to about -8.8 |
| 0 52W | 29 49 | 3-2 | 7.51 | A0 | 1-1-1 | |
| 0 44W | 13 29 | 2 | 7.5 | B9 | 1-1-1 | |
| 0 51W | 14 37 | 2 | 6.80 | B9 | 1-1-1 | Double, take following component (right) |
| 2 54W | 30 56 | 3 | 7.29 | A2 | 1-1-1 | Light clouds at 13h - quite thick at 1.50 clearing again from 2.30 on filling in again toward end of exp. |

| | | MC. | SC | SW. | HT. | ST. |
|---|---|---|---|---|---|---|
| | | | | | s | m |
| Dec. 14 | 12 | -18.6 | -1 28.9 | +36.6 | -19.0 | -0.4 |

Date Tuesday December 14-15, 1937 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle Ind |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2818 | HD. 213126 | 22 24.2 | +87 34 | I-12 | Astra II | set c10 | set -5.0 | 17 26 | 18 58 | 3 | |
| 2819 | 370 | 00 03.3 | +73 41 | " | " | " | -4.0 | 19 03 | 20 53 | 1 | |
| 2820 | 5914 | 00 55.6 | +88 29 | " | " | " | set -4.5 | 20 58 | 21 48 | 2 | |
| | 23838 | 03 43.1 | +44 40 | | | | | | | | |
| 2821 | 29678 | 04 35.4 | +75 46 | " | " | " | -4.8 | 22 53 | 23 27 | 3 | |
| | 25473 | 03 57.7 | +73 18 | " | " | " | | | | | |

Thu., 1937 Dec 16-17, Hd-MR, cloudy.
Fri., 1937 Dec 17-18, H-MR, cloudy.
Sat., 1937 Dec 18-19, M-MR, cloudy.

Set focus to 26.30

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 00W | +87 48 | 2 | 7.43 | A2 | 1-1-1 | Telescope E of pier. Light clouds |
| | 2 03W | +73 53 | 2 | 7.42 | A0 | 1-1-1 | Filter used; started from $19^{30}-19^{50}$. Hazy thin |
| | 1 51W | +38 43 | 2 | 6.54 | A2 | 1-1-1 | thick haze. Clouds last part. |
| | | | | 6.35 | G0 | | Cloudy |
| | 0 02W | +15 51 | 3 | 6.32 | F0 | 1-1-1 | Haze. Clouds |
| | | | | 7.30 | F5 | | Completely thick when closed up at 2.00. |

| | | MC | SC | SW | M.T. | S.T. |
|---|---|---|---|---|---|---|
| | | s | m s | | s | m |
| Dec. 15 | 12 | -15.0 | -1 29.3 | +43.5 | -15.8 | -0.3 |
| Dec. 16 | 12 | -15.1 | -1 29.8 | +49.4 | -17.4 | -0.4 |
| Dec. 17 | 12 | -15.1 | -1 30.0 | +56.2 | -19.0 | -0.5 |
| Dec 18 | 12 | -14.3 | -1 30.2 | +64.0 | -21.4 | -0.6 |
| Dec. 20 | 12 | -14.6 | -1 30.1 | +17.9 @ 01m | -22.2 Asst | -0.3 |
| Dec. 21 | 12 | -11.5 | -1 30.4 | +34.6 | -23.9 | -0.4 |

Date Monday - Dec 20-21, 1937 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2822 | H.D. 35522 | 05 20.2 | +15 23 | I - 12½ | Astra II | Set .010 | Set -7.2 | 00 05 | | |
| | Tuesday Dec 21-22, 1937 H-L | | | | | Cloudy with Haze. | | | | |
| | Wed Dec 22-23, 1937. Clear at 6.00. but mirror soaking wet. Put all heat on. See next page. | | | | | | | | | |

closed about 23.30

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | +15 - 24 | O | 7.02 | Bg | 1-1 | had hard job setting temp, very sticky |
| | | | | | | | Light clouds at 12.20 thick at 12.30 Closed at 2.30. |
| | | | | | | | Dec 22 12 -10.7s -1m 30.5s -28.5s -26.0s -0m4 |

at m.

167

Date Wed Dec 22-23, 1937 HH- Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature begun | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1823 | HD22136 | 03 28.9 | 46 +43 | I-12 | Astra II | 010 | -0.1 | 9.20 | 10.10 | 2 | 1.6 |
| 1824 | 36756 | 05 28.9 | 44 15 | " | " | " | -0.2 | 10.22 | | 3 | |

See previous page.
Horizon practically clear at 7.00

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| W 25$^{m}$ | 46 53 | 2 | 6.74 | By | 1.1,1 | Very light wind |
| | 44 17 | | 7.59 | 75 | 1.1, | clouds from 11.10 increased |
| | | | | | | slowly closed slide at 12.15 |
| | | | | | | closed up at 1.15 still thick |
| | | | | | | wind increasing slight precipitation |

| | | M.R. | S.R. | S.W. | H.T. (Watch) | S.T. |
|---|---|---|---|---|---|---|
| Dec. 23 | 12 | +00$^{s}$.1 | −1$^{m}$ 20$^{s}$.6 | −11$^{s}$.4 | −26$^{s}$.6 | −0$^{m}$.5 |

169

Date Thursday Dec 23-24 1937, M Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2825 | HD. 16594 | 2 34.5 | 31 53 | I-12 | Astra II | .010 | -3.0° | 19 51 | 21 51 | 1 | 15H 3 |
| 2826 | 29487 | 4 33.5 | 43 55 | — | — | — | -3.7 | 21 56 | [illegible] | 2 | - 4 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | Saturday December 25-26, 1937 1H-1R Cloudy | | | | | | | | | 7 [illegible] |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

2

Cloudy at sunset, cleared about 19.00 but still cloud near horizon especially in south.

| Ending Time G.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 21 51 1 | 1 05 W | 32 03 | 0-1 | 7.56 | A2 | 1-1½-1 | Formed sidereal part of strongren watch stopped. used waltham. hazy- |
| | — | 43 57 | 0- | 7.30 | B9 | 1-1-1 | hazier after 22.30 image rather faint completely clouded over at 23.05 |
| | | | | | | | called end of 2826 at 23.00. |
| | | | | | | | remained thick with east wind closed down at 23.40 |
| | | | | | | | fuel blower on |

| | | M.C. | S.C. | SW | Watch M.T. | Watch S.T. |
|---|---|---|---|---|---|---|
| | | | h m s | | s | m s |
| Dec. 24 | 12 | -08.7 | -1 30.3 | +48.9 | -27.4 | -0.2 |
| | | | | | | Fast |

Snow with. snow.

171

1937 Y-L

Date Sunday Dec 26-27 Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Exp. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2827 | HD 10588 | 01 38.2 | 31 43 | I 12 | astra II | 010 | -00.5 | 6 20 | 7 10 | 3' | 4°E |
| 2828 | HD 26546 | 04 06.8 | 17 02 | " | " | " | -1.5 Set | 9 20 | 11 00 | 1 | 7°W |
| 2829 | HD 43583 | 06 11.9 | 14 05 | " | " | " | -1.9 | 11 19 | 12 29 | 2 | |
| 2830 | HD 59059 | 07 23.2 | 15 16 | " | " | " | -1.8 | 12 37 | 1 17 | 3 | 10°W |
| 2831 | HD 73080 | 08 51.3 | 28 39 | " | " | " | -1.6 | 1 [illegible] | 3 35 | 1 | 15°W |
| 2832 | HD 82010 | 09 24.2 | 31 45 | " | " | " | -1.6 | [illegible] 10 | 5 40 | 2 | 18°W |
| | Focus Test | | | | | | Outside through | | | | |

D.d. not open at first account of strong wind. 172

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | comp. | REMARKS |
|---|---|---|---|---|---|---|---|
| | 28m E | 31 54 | 1 | 7.20 | G5 | 1-2 | S.d wait 0m8 fast chronic chron accuracy |
| 1 00 | 57m W | 17 08 | 1 | 7.08 | G5 | 1-1-1 | S.d wat near 5 03.0 on mean watch 9 59.0 |
| | | 14 04 | 1 | 6.46 | B9 | 1-1-1 | |
| | 0 05 E | 15 14 | 1 | 6.07 | A0 | 1-1-1 | |
| | 0 35 W | 28 29 | 1 | 7.50 | G5 | 1-1-1 | |
| | 2 18 W | 31 36 | 1 | 7.55 | B8 | 1-1-1 | Edge light close at end 55 |
| | | | | | | 15.11 | 59½ watch |

| | | N.S. | S.E. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Dec 27 | 12 | −05.8 | −1m30.5 | −15.0 (reset) | −02.6 | −0m8 |

Date Monday Dec 27-28, 1937, M-L Julian Day

Hartmann -3°.5 at 16.30.

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2833 | HD 2358 | 0 22.3 | 15 29 | I-12 | astra II | .010 | set -2.0 -2.5 1.0 ht. | 17 32 | 18 22 | 3 | |
| 2834 | 7157 | 1 6.8 | 61 10 | — | — | — | -1.0 | 18 30 | — | 1 | |

Dome temp +29°F at 16:30 28°F at 17:30

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 0 04 W | +15 40 | 2 | 6.71 | A5 | 1-1-1 | light clouds at sunset clear later with brisk NW wind very difficult to turn dome W. Wind shifted E. Image good difficult to set on stg. Cost. time [illegible] right on finder cross wire. Image lost during most of this time absolutely black at 19 h. |
| | 61 22 | 1 | 6.27 | B9 | 1-1 | |

Closed dome at 19.40.

Put heat on around mirror and blower on

Plate box in dome

| | | N.C. | S.C. | S.W. | Watch N.T. | S.T. |
|---|---|---|---|---|---|---|
| Dec 28 | 12 | -04.s6 | -1m30.s4 | -09.s1 | -04.s6 | -0.m8 |

Date Sunday December 28-29, 1937 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2835 | HD 222886 | 23 35.0 | +74 43 | I-12 | Astra II | Set 010 | -1.0 | 17 26 | 18 50 | 2 | |
| 2836 | 222387 | 23 36.0 | +73 25/36 | " | " | " | -0.8 | 15 02 | | 2 | |
| | ~~221098~~ | 23 50.0 | +73 51 | | | | | | | | |
| 2837 | 25473 | 03 57.7 | +73 18 | " | " | " | +0.7 | 20 18 | | 1 | |
| 2838 | 29329 | 04 32.1 | +76 25 | " | " | " | +0.7 | 23 55 | 1 15 | 2 | |
| 2839 | 73797 | 08 35.1 | +73 39 | " | " | " | +1.0 | 2 16 | 3 56 | 3 | |
| 2840 | 213126 | 22 24.2 | +87 34 | " | " | " | +1.0 | 4 14 | 6 04 | 1 | |
| 2841 | 107192 | 12 14.4 | +88 15 | " | " | " | +1.2 | 6 09 | 7 04 | 2 | |

Tuesday December 29-30 H-L Cloudy 11 night

Thursday 1937 December 30-31, Y-MR Cloudy

Friday - Dec 31, 1937 - Jan 1, 1938 M, MR Blizzard all night

Telescope E

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0 34 W | +74 59 | 1 | 6.16 | $A_2$ | 1-1-1 | High wind. Low clouds. |
| | | +73 42 | 1-0 | 6.86 | A 5 | 1-1 | Light clouds. Shut 18[15] |
| | | | | 6.55 | F9 | | Shut at 13[50] |
| | 0 08 E | +73 26 | 1 | 7.30 | F5 | 1-1-1 | Closing; one clock. Shut 2[40]-3[25] |
| | 2 49 W | +73 33 | 0-1 | 6.92 | F5 | 1-1-1 | Shut 23[45]-00[35] clouds 1[10] |
| | 1 28 W | +73 55 | 0-1 | 7.46 | $A_2$ | 1-1-1 | |
| | 2 02 W | +87 45 | 0 | 7.43 | $A_2$ | 1-1-1 | |
| | 0 59 W | +88 04 | 0 | 6.56 | $F_0$ | 1-1-1 | |

| | | M.C. | S.C | SW. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Dec. 29 | 12 | -03[s]·3 | -1[m] 30[s]·5 | -02[s]·9 | -02[s]·2 | -0[m]·7 |
| Dec. 30 | 14 | -01·0 | -1 27·3 | +07·9 | -04[s]·3 | -0[m]·7 |

ing and all morning

Date 1938 JAN. 1-2, Saturday, H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2842 | 98354 | 11 13.7 | 14 49 | I-12½ | Astro II | .010 | -05.3 | 04 48 | 05 30 | 3 | W 0 4½ |
| | FOCUS | - | - | " | " | " | -05.2 | 06 08 | - | | |

Mon Jan 3-4 1938 Rd-L Cloudy

Tuesday January 4-5, 1938 H-L Cloudy with light snow

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +21°F REMARKS |
|---|---|---|---|---|---|---|---|
| 05 30 | W 0 42 | 14 35 | 3 | 7.21 | G0 | 1-1-1 | double; took 3 component, ~~4~~ brighter. setting 5 |
| - | OUTSIDE | THROUGH | BASE | - | - | 12-15 | SLIDE = 26.30 TILT = 19.6 " 9½ |

Heavy clouds until about 3.40. Began to open up but shutters gave trouble; Stuck at several places and had to be eased on by hand. Fitful light at times. Closed and stopped at 5.30 Snow later. Closed 6.15, shutters closed all right.

Used Jan 4, 1938 Hd
Changed to I-25
I 12 focus was I6.36 tilt 19.47
~~Set I 25 focus 23.3 Tilt 23.25~~

| | | | | | | Watch |
|---|---|---|---|---|---|---|
| Jan. 3 | 12 | +02.0 | -1 | 30.3 | +32.1 | -06.9 -0.7 |
| Jan. 4 | 12 | +03.0 | -1 | 30.5 | +40.5 | -08.0 -0.8 |
| Jan. 5 | 12 | +04.1 | -1 | 30.5 | -11.7 Reset | -10.4 -0.9 |

179

Date 1938 Jan 4-4 5-6 Wed Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2842F | Focus | | | I-25 | Extra I | 010 | ~~-7.0~~ | | | 2 | |
| 2843 | HD 5394 | 00 50.7 | 60 11 | " | Process | " | -6.4 | 5.40 | 5.44 | 3 | |
| | | | | | | | | 5.45 | 5 53 | | |
| | | | | | | | | 5 54 | 6 10 | | |
| 2844 | 2942 | 00 27.6 | 27 04 | " | Extra I | M | -6.5 | 6.16 | ~~8 00~~ | 1 | |
| 2845 | 22136 | 03 27.7 | 46 44 | " | | M | -6.5 | ~~8 06~~ | 9 22 | 2 | |
| ~~2846~~ | ~~44194~~ | ~~06 31.0~~ | ~~17 10~~ | | | M | -9.0 | 11 21 | | | |
| 2846 | 73080 | 08 31.3 | +28 39 | " | " | M | -8.0 | 1.16 | 3.48 | 4 | |
| 2847 | 99552 | 11 24.0 | +30 58 | " | " | M | -8.2 | 3.53 | 6.23 | 1 | |
| | | | | | 6 | | | | | | |
| | | | Thurs | Jan ~~4~~ | | | | | | | |
| | Changed to | | I-12 | Set focus -26.36 | | | Tilt | 19.45 | | | |
| 2847F | Focus test | | | I-12 | Extra II | 010 | -10.4 | | | 1 | |
| | | 1938 | Jan. 6-7 | Friday | Hd-MP | | Cloudy all night | | | | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | Bare outside | | | | | 12/8 | Set 1 From 23.3 } Tel 23.25 |
| | | | | | | | " 5 " 23.4 } |
| | | | | | | no filter | |
| | | 60 22 | 1 | 2 | Bo | 8,8 | set 1 γ - α = 5 |
| | | | | | | 8,8 | " 5 9 spots, 7 m |
| | E 1m | ~~27 55~~ | | | | 8,8 | " 9 |
| | W 2h 12 | 27 55 | 1 | 7.16 | G5 | 3,3,3 | |
| | W 33m | 46 53 | 1 | 6.74 | B9 | 3,3,3 | Thick at 7.00 Cloud 9 - 0 - 11 00 |
| | | | | ~~7.09~~ | ~~F8~~ | 3, | Thick again Clear at 100 again |
| | 1.57 W | +28 29 | 1 | 7.50 | G5 | 3-3-3 | |
| | 1.41 W | +30 45 | 1 | 7.44 | F2 | 3-3-3 | |

| | | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Jan 6 | 12 | +05.1 | -1m30.6 | -03.2 | -00.5 | -0.8 |

| | Bare outside | | | | | 7/5 | |
|---|---|---|---|---|---|---|---|
| Jan 7 | 12 | +06.1 | -1 | 30.8 | +03.0 | -10.0s | -0.9m |

181

Date 1938 January 7-8, Friday H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2847 $F_2$ | Iris test | | | I-12 | Astro II | 010 | -8.0 | 15 00 | | 1 | |
| 2848 | HD 222387 | 23 35.0 | +73 25 | " | " | " | -7.0 | 17 35 | 18 15 | 2 | |
| 2849 | 224098 | 23 50.0 | +73 51 | " | " | " | -6.9 | 18 19 | 19 01 | 3 | |
| 2850 | 370 | 00 03.3 | +73 41 | " | " | " | -7.0 | 19 05 | 20 40 | 4 | |
| 2851 | 29678 | 04 35.4 | +75 46 | " | " | " | -7.9 | 20 45 | 21 15 | 1 | |
| 2852 | 23838 | 03 43.1 | +44 [illegible] | " | " | " | -6.8 | 21 19 | 21 44 | 2 | |
| 2853 | 23477 | 03 40.4 | +43 46 | " | " | " | -7.0 | 21 47 | 22 17 | 3 | |

(6)

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | Continued thin haze | | | | 10/10 | +16° F<br>setting 2 26.35<br>setting 6 26.30 |
| 1 29 W | +73 41 | 1 | 6.96 | G5 | 1-1-1 | |
| 1 58 W | +74 07 | 1-2 | 6.55 | B9 | 1-1-1 | |
| 3 25 W | +73 55 | 1-2 | 7.42 | A0 | 1-1-1 | |
| 0 31 E | +75 52 | 1-0 | 6.32 | F0 | 1-1-1 | |
| 0 47 W | +[illegible] 45 | 1 | 6.35 | G0 | 1-1-1 | Brilliant sunrise |
| 2 21 W | +[illegible] 55 | 1 | 7.05 | B9 | 1-1-1 | Light clouds, 22[illegible]-32[illegible], [illegible] H' = ∞<br>Thick haze with only [illegible], until [illegible],<br>when it definitely [illegible]; Cloud 6[illegible] |

| | | HC | SC | SW | MT | ST |
|---|---|---|---|---|---|---|
| | | | | | s | w |
| Jan 8 | 12 | +07.1 | -1 31.0 | +09.4 | -04.7 | -0.8 |

Date 1938 Saturday, Jan 8-9, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2854 | HD 7374 | 1 8.8 | 15 36 | I-12 | astra II | .010 | -8.6 | 19 27 | 20 11 | 1 | 1 30 W |
| 2855 | 35909 | 5 22.9 | 13 37 | — | — | — | -8.2 | 20 36 | 22 20 | 2 | 0 10 E |
| 2856 | 43683 | 6 12.4 | 14 25 | — | — | — | -8.3 | 22 25 | 23 25 | 4 | |
| 2857 | 47395 | 6 33.3 | 28 21 | — | — | — | -8.5 | 23 28 | 00 18 | 1 | 0 37 W |
| 2858 | 49949 | 6 45.8 | 44 58 | — | — | — | -7.6 | 00 24 | 01 31 | 2 | 1 37 E |
| 2859 | 70338 | 8 16.5 | 13 57 | — | — | — | -8.0 | 01 36 | 04 06 | 3 | 2 42 W |
| 2860 | 97089 | 11 10.5 | 60 28 | — | — | — | -7.8 | 04 37 | 05 31 | 4 | 1 3 W |
| | FOCUS | | | | | | -8.0 | 05 50 | | | |

(7)

Cloudy at sunset
Partially clear with heavy haze at 6.30 p.m.
Clear at 6.45. Started to open at 7.00 but heavy bank of clouds came up from N before set on star. Aborted.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | +10°F | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | 1 50 W | 15 46 | 0-0 | 5.80 | B8 | 1-1-1 | seeing very poor, intermittent clouds all during sp[illegible] Clear at 20.09 cleared later |
| | 0 10 E | 13 35 | 0-0 | 6.32 | A2 | 1-1-1 | Lucky Tel again at 21 [illegible] at 21.25 |
| | 0 05 W | 14 23 | 0-0 | 5.98 | A0 | 1-1-1 | clear |
| | 0 37 W | 28 17 | 0-0 | 5.79 | B8 | 1-1-1 | |
| | 1 37 W | 44 53 | 0 | 6.24 | A5 | 1-1-1 | |
| | 2 43 W | 13 47 | 0-1 | 7.14 | A2 | 1-1-1 | began to haze 3.15. Sky very uncertain [illegible] |
| | 1 13 W | 60 15 | 2 | 6.74 | A3 | 1-1-1 | still uncertain; seeing inferred. mostly hazy |
| | [illegible] | [illegible] | [illegible] | - | - | 12-15 | clear [illegible] |
| | LHOE = 26.30 | | TILT = 19.5 | | | | closed up 5.45 |
| | | | | | | control | clock set 7 sec: clamp which stops one of differentials has become gummy & will not disengage. |

Date Monday, Jan 10-11, 1938, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2861 | HD 7157 | 1 6.8 | 61 10 | I-12 | astra II | .010 | -7°.5 | 17 45 | 18 45 | 1 |
| 2862 | 18473 | 2 53.1 | 59 17 | — | — | — | -7.9 | 18 52 | 20 44 | 2 |
| 2863 | 34054 | 5 9.5 | 14 56 | — | — | — | -7.8 | 20 50 | 22 46 | 3 |
| 2864 | 35522 | 5 20.2 | 15 23 | — | — | — | -7.9 | 22 51 | 00 11 | 4 |
| 2865 * | 44766 | 06 18.5 | 29 46 | " | " | " | -7.8 | 00 16 | | 1 |

1938 Tuesday, Jan 11-12 M-L cloudy

1938 January 13-14, Thursday, Hd-MR - cloudy.

(5)

Set focus to 26.32

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | M.C. S.C SW M.T. ST |
| | 0 38 W | 61 22 | 0 | 6.27 | B9 | 1-1-1 | Jan. 10 12 +09.7 -1 30.9 +14.3 +0.6 +0.4 |
| | 0 50 W | 59 24 | 1-2 | 7.35 | A0 | 1-1-1 | Reset |
| | 0 37 W | 14 58 | 2 | 7.27 | B9 | 1-1-1 | |
| | 1 51 W | 15 23 | 1 | 7.02 | B9 | 1-1-1 | |
| | | 27 43 | 1 | 6.50 | B9 | 1-1 | Light cirrus clouds shortly after start, set at 00 55. |
| | | | | | | | * Thin plate in top of Cassegrain cell but I don't think it would flex at 2.30, at 0 tilt at 30° |
| | | | | | | | Jan. 11 12 +09.0 -1 30.9 +29.6 +04.0 +0.5 |
| | | | | | | | Jan 12 12 +12.3 -1 30.8 +27.2 +02.6 +0.5 |
| | | | | | | | Jan 13 12 +12.0 -1 31.0 +32.8 +00.4 +0.5 |
| | | | | | | | Jan. 14 12 +14.2; -1 30.9; +38.5; -01.5 +0.4 |

Date 1938, January 14-15, Friday. H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2866 | HD 35239 | 05 18.2 | +31 03 | I-12 | Astra II | Set 010 | −4.5° | 22 50 | 23 30 | 2 |
| 2867 | 46031 | 06 25.9 | +15 58 | " | " | " | −4.5 | 23 33 | 24 33 | 3 |
| 2868 | 63630 | 07 44.8 | +46 12 | " | " | " | −4.6 | 00 39 | 02 39 | 4 |
| | FOCUS | — | — | " | " | " | −7.7 | 05 45 | — | — |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | 1938 January 15-16, Saturday, M-MR; cloudy | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

(3)

Cloudy with snow most of day & only clearing breaking up 9[45]–10[00]. Delayed setting a bit by snow blew off shutters on opening.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | +08°F | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 29 W | +31 04 | 0 | 5.91 | B5 | 1-1-1 | Very windy. Light snow from clear sky - or from ground? |
| | 1 23 W | +15 56 | 0 | 6.51 | A5 | 1-1-1 | Then more (snow shining thro hole of main mirror) |
| | 2 10 W | +46 04 | 0 | 6.61 | A3 | 1-1-1 | Then climbs from West at start; image goes 125 → 200 ° flux. |
| | OUTSIDE | THROUGH | BASE | – | – | 12-15 | clearing up at end. mostly cloudy for rest of night |
| | SLIDE = 26.32 | | TILT = 19.5 | | | | closed up 5.30. clearing by 6.30! |
| | | | | | | | guide pilot light not working |
| | | | | | | | Jan 15 12 +14.4 −130.9 +44.1 −01[s].0 +0[m].5 |
| | | | | | | | Jan. 17 12 +17.8 −131.3 +52.9 −03[s].9 +0[m].4 |

Date Monday, Jan 17-18, 1938, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2869 | HD 9100 | 1 24 | 17 51 | I-12 | Astra II | .010 | -9.6 | 17 57 | 19 27 | 1 | |
| 2870 | 26171 | 4 34 | 13 8 | — | — | — | -9.7 | 19 39 | (20 47) | 2 | |
| 2871 | 55383 | 7 7.6 | 16 20 | — | — | — | -11.3 | 23 36 | 01 16 | 3 | |
| 2872 | 94118 | 10 46.7 | 46 20 | " | " | " | -10.8 | 01 24 | 03 24 | 4 | |
| 2873 | 97559 | 11 10.5 | 60 25 | " | " | " | -10.6 | 04 37 | 05 43 | 1 | |
| 2874 | 133530 | 14 55.5 | 28 40 | " | " | " | -10.9 | 05 53 | 07 05 | 2 | |

16

| Ending Time E.S.T. | Hour Angle End | Declination | | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | 1 30 W | 18 | 01 | 0 | 6·02 | A2 | 1-1-1 | Light clouds over whole sky, difficult to see image. Image faint and in clouds during most of observation. |
| (20 [illegible] | 0 11 W | 13 | 12 | 0 | 6·00 | B9 | 1-1-1 | Light clouds over most of sky. Cloud fairly thick. Sky remained thick after 20.15. Lake 20.19 as end of this. |
| | | | | | | | | Remained thick. Cloud done at 21.35 |
| | | | | | | | | Cleared again about 23.00 |
| | 1 37 W | 16 | 14 | 0-0 | 6·66 | M0 | 1-1-1 | Tried to take HD 55283M seeing too bad to a great difficulty in getting through. Cloud |
| | 0 06 W | 46 | 06 | 0 | 7.13 | A2 | 1-1-1 | Light cloud from 1.45 - image, hard to see! Quite clear again at +.30 |
| | 2 01 W | 60 | 15 | 0 | 6.74 | A3 | 1-1-1 | |
| | 0 24 E | 28 | 29 | 0 | 6.70 | A0 | 1-1-1 | |

| | | M.C. | S.C. | S.W. | M.T. | S.T |
|---|---|---|---|---|---|---|
| Jan. 18 | 12 | +19·0 | -1 31·5 | +62·5 | -02ˢ·4 | +0ᵐ 4 |

Date Tuesday January 18-19, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2875 | HD 1243 | 00 11.6 | +13 22 | I-12 | Agfa II | Cat 010 | -14.5 | 17 55 | 20 25 | 3 |
| | 35984 | 05 25.4 | +29 07 | " | " | " | -14.7 | 20 30 | — | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +3° at 18^00 REMARKS |
|---|---|---|---|---|---|---|---|
| | 3 45W | +13 33 | 1-0 | 7.58 | A3 | 1-1-1 | for M. Stage 18^30 Stage 18^45—19^10 Stink again. Closed up 21^45 |

| | M.E. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|
| Jan. 19 12 | +20.1 s | -1 m 31.4 s | +05.1 s Adv 1 m | -01.0 s | +0 m 1 |

193

Date Wed Jan 19-20, 1938 Hel- Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2876 | HD 26911 | 04 10.1 | 15° 09 | I-12 | Cramer II | 010 | -11.0 | 7.56 ~~7.52~~ | 8 s 8 4 | 1h23m |

(1)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2 58 4 | W 23m | 15 12 | 2 | 6.77 | $F_5$ | 1/2, 1 | mostly Thin clouds. Cloud 10.45 |

| | | H.A. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Jan. 20 | 12 | +21s.4 | −1m 31s.4 | +10s.8 | −0s.1 | +0m.4 |

Date Thurs Jan 20-21, 1938 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2877 | HD22136 | 03 28.9 | 46 46 | I-12 | extra II | 010 | -7.3 | 7 08 | 8 02 | 1 | |
| 2878 | 44867 | 06 19.1 | 16 07 | " | " | " | -4.5 | 10.45 | 11.45 | 2 | |
| 2879 | 57049 | 07 14.5 | 15 21 | " | " | " | -4.5 | 11.49 | 12.29 | 3 | |
| 2880 | 56537 | 07 12.3 | 16 43 | " | " | " | -4.5 | 00 34 | 30 sec | 4 | |
| - | - | - | - | - | - | - | - | 00 36 | 1 min | | |
| - | - | - | - | - | - | - | - | 00 38 | 2 min | | |
| 2881 | 75486 | 08 45.2 | 62 20 | " | " | " | -4.5 | 00 52 | 01 02 | 1 | |
| 2882 | 75487 | 08 45.2 | 59 26 | " | " | " | -4.5 | 01 06 | 01 24 | 2 | |
| 2883 | 82010 | 09 24.2 | 31 45 | " | " | " | -4.6 | 01 29 | 02 29 | 3 | |
| | FOCUS | - | - | " | " | " | -4.8 | 03 45 | - | - | |

1938 Jan 21-22, Friday, M-MR, cloudy.

1938 Jan 22-23, Saturday, H-MR, Cloudy

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +23°F at 2.00 REMARKS |
|---|---|---|---|---|---|---|---|
| | W 11m | 46 53 | 2 | 6.74 | B9 | 1, 1, 1, | clouds latterly. |
| | W 1h 06 | 16 04 | 3 | 7.13 | G5 | 1, 1, 1 | ← note temp. Effect of moderating weather? |
| | W 0 55 | 15 15 | 3 | 6.47 | A0 | 1, 1, 1 | |
| | W 1 02 | 16 37 | 3 | 3.71 | A2 | 3 | setting 1½ |
| | W 1 04 | – | – | – | – | 3 | " 4 |
| | W 1 07 | – | – | – | – | 3 | " 7 |
| | E 0 04 | 62 10 | 4 | 6.00 | F0 | 1, 1, 1, | suff. lit {thin clouds in Galaxy heavy mist rolling around |
| | W 0 18 | 59 15 | 4 | 6.36 | F0 | 1, 1, 1, | suff. lit |
| | W 0 45 | 31 34 | 4 | 7.55 | B8 | 1, 1, 1, | |
| | OUTSIDE | THROUGH | BASE | – | – | 13 – 16 | sky fully in from south, west & NW at end of exposure. |
| | SLIDE = 26.33 | TILT = 19.5 | | | | | closed up 6.20 gen. pilot light not working |

| | | M.S. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| | | s | m s | s | s | m |
| Jan. 21 | 12 | +22·8 | −1 31·0 | +21·5 | +02·8 | 0·0 Reset |
| Jan. 22 | 12 | +24·1 | −1 31·3 | +30·7 | +00·6 | −0·3 Reset |

197

1938

Date Sunday jan 23-24 / Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2884 | H.D 30736 | 04 45.1 | +45 46 | I-12 | Astrat | 010 | +2.7 | 6 05 | 7 45 | 4 | |
| 2885 | H D 31069 | 04 47.7 | 43 54 | " | " | " | +2.5 | 7 54 | 8 30 | 1 | |
| | " | " | " | " | " | " | | | | | |
| | | Monday | Jan 24-25 | | H-L | Rain then more rain | | | | | |
| | | Tuesday | January 25-26 | | H-L | Cloudy all day. Part of clearing | | | | | |

(2)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | $1^{h}\ 11^{m}$ E | 45 49 | 2-1 | 7.19 | F8 | 1-1-1 | ] |
| | $23^{m}$ E | 43 56 | 1 | 5.96 | B9 | 1-1 | ] Shut off by Fog. |
| | | | | | | | Jan. 24 13 +24.1 -1 33.3 +34.5 $-01^{s}.4$ $+0^{m}.4$ |
| | $8^{20}-9^{30}$. Still very hazy. The snow-clouds $9^{30}$ — | | | | | | |
| | | | | | | | Jan 25 12 +26.8 -1 31.5 +41.5 -03.7 +0.4 |
| | | | | | | | 26 12 +27.4 -1 31.7 +48.8 -05.8 +0.4 |

199

Date Wed Jan 26-27 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2886 | H17 68776 | 08 08.8 | 13 22 | I-12 | Eastman II | 010 | -10.0 | 11 39 | 1 59 | 2 | .54W |
| 2887 | " 98388 | 11 14.0 | 13 56 | " | " | " | -10.2 | 2 06 | 3 12 | 3 | 1.12W |

(2)

all evening thick haze and light snow clearing about 10.30
Had trouble with dome opening, dec clamp. 20
Hard to chop ice from under dome room door.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | REMARKS |
|---|---|---|---|---|---|---|
| 1 [illegible] 2 | 1 54 W | 13 12 | O | 7.48 K0 | 1, 1, 1 | haze - light snow falling at 12.15 |
| [illegible] 3 | 0 03 W | 13 43 | O | 7.58 F8 | 1-1½ | haze - light clouds - Stars good at 3.12 clouds at 4.00, sky generally cloudy, some bright stars showing. |

| | | MF | SC | SW | MT | ST |
|---|---|---|---|---|---|---|
| Jan 27 | 12 | +28.6 | -1 31.7 | +54.1 | -06.8 | +25.3 |

Date Friday January 27-28, 1938 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2888 | H.D. 1606 | 00 15.2 | +30 23 | I-12 | Astro II | 0.10 | -13.0 | 18 03 | 18 28 | 4 | | |
| 2889 | 6475 | 01 00.7 | ~~+61 10~~ +59 20 | " | " | " | -13.4 | 18 38 | 19 38 | 1 | | |
| 2890 | 16111 | 02 30.2 | +29 58 | " | " | " | -13.5 | 19 42 | 21 02 | 2 | | |
| 2891 | 23838 | 03 43.1 | +44 40 | " | " | " | -13.4 | 21 07 | 21 57 | 3 | | |
| 2892 | 25237 | 5 18.2 | +81 03 | " | " | " | -13.7 | 22 03 | 22 28 | 4 | | |
| 2893 | 34762 | 5 14.7 | +27 57 | " | " | " | -13.7 | 22 38 | 23 08 | 1 | | |
| 2894 | 73717 | 08 35.1 | +73 39 | " | " | " | -13.9 | 23 20 | 01 10 | 2 | | |
| 2895 | 213126 | 22 24.2 | +87 34 | " | " | " | -13.9 | 01 44 | 03 29 | 3 | | |
| 2896 | 96770 | 11 04.2 | +88 11 | " | " | " | -13.9 | 03 31 | 05 11 | 4 | | |
| 2897 | 107192 | 12 14.4 | +88 15 | " | " | " | -13.8 | 05 19 | 06 03 | 1 | | |
| 2898 | 93875 | 10 45.1 | +59 51 | " | " | " | -14.0 | 06 13 | 07 00 | 2 | | |
| | FOCUS | - | - | " | " | " | -14.0 | 07 15 | - | - | | |

1938 January 28-29, Friday, H-MR, Cloudy

1938 January 29-30, Saturday, Hd-MR, cloudy, snow & sleet.

(4)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | -4°F at 6.30 A.M. REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 20 W | +30 35 | 0-1 | 5.77 | B8 | 1-1-1 | setting 3 |
| | 2 44 W | +59 32 | 1 | 6.78 | A0 | 1-1-1 | Trouble with dec clamp. Light on Tel. circle |
| | 2 39 W | +29 07 | 1 | 7.05 | B8 | 1-1-1 | Light on for star second very faint (?) |
| | 3 20 W | -44 47 | 1 | 6.35 | G0 | 1-1-1 | Added in sheet [illegible] $21^{20}$ — $21^{45}$ [illegible] |
| | 1 17 W | -31 04 | 1 | 5.91 | B9 | 1-1-1 | Very thick Tel. |
| | 2 [illegible] | +27 53 | 1-2 | 6.25 | B9 | 1-1-1 | Haze. |
| | 0 40 W | +73 31 | 2-1 | 7.46 | A2 | 1-1-1 | Clear E of fair. stays $23^{30}$-$3^{h}$ star gone |
| | 10 40 E | +92 15 | 2-1 | 7.43 | A2 | 1-1-1 | Trouble with dec. Q.M.; end jam? also started exposure on wrong star |
| | 2 05 W | +88 00 | 1-2 | 7.39 | B8 | 1-1-1 | |
| | 1 55 W | +88 00 | 1-2 | 6.56 | F0 | 1-1-1 | |
| | 4 23 W | +59 40 | 1-2 | 6.66 | K0 | 1-1-1 | suff. dist |
| | OUTSIDE | THROUGH | BASE | - | - | 12-15 | SLIDE = 26.32 TILT = 19.5 |

generator field light is out

Slight heat indication very hard to make; left it at +28°C

Jan. 28 12 +30.2 -1 31.6 +59.6 +03°.0 +0.5 in

Date Monday Jan 31 - Feb 1, 1938, M - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2899 | HD 26039 | 4 23 | 16 16 | 1 - 12 | astra II | .010 | -5°.4 | 19 15 | 21 31 | 3 |
| 2900 | 44766 | 6 18.5 | 28[9] 46 | — | — | — | -5.6 | 21 37 | 22 55 | 4 |
| 2901 | 58729 | 7 21.8 | 15 30 | — | — | — | -5.8 | 23 00 | 00 40 | 1 |
| 2902 | 80613 | 09 15.7 | 15 48 | " | " | " | -5.6 | 00 44 | 02 00 | 2 |
| 2903 | 91181 | 10 26.5 | 44 43 | " | " | " | -5.5 | 02 08 | 04 18 | 3 |
| 2904 | 133909 | 15 01.9 ~~02.9~~ | 59 55 | " | " | " | -5.4 | 04 29 | | 4 |

(6)

Small local snow flurries after. sunset delayed opening. Wind fairly strong.

| Ending Time E.S.T. | Hour Angle End | Declination | | Seeing | Ptg. Mag. | | |
|---|---|---|---|---|---|---|---|
| | / 52 W | 16 | 22 | 0 | 7.50 | B9 | 1-1-1 |
| | / 00 W | 29 | 44 | 0 | 6.50 | B9 | 1-1-1 |
| | / 42 W | 15 | 26 | 0 | 6.97 | B8 | 1-1-1 |
| | / 08 W | 15 | 37 | 0 | 6.49 | A0 | 1-1-1 |
| | 2 15 W | 44 | 28 | 0 | 7.46 | A5 | 1-1-1 |
| | | 59 | 45 | 0 | 7.32 | A2 | 1-1½ |

| REMARKS | | MC | SC | SW | MT | S.T |
|---|---|---|---|---|---|---|
| Light haze | Jan 29. 10. | +31°5 | −1m 31·4 | +1m 06·1 | +01·4 | +0·5 |
| | Jan 31 12 | +34·3 | −1 31·4 | +1 26·4 | −02·8 | +0m4 |
| | | | | +26·4 Reset - adv 1m | | |

sky clouding over at 4.50, slight precipitation. clear at 5.30.

| | | | | | | |
|---|---|---|---|---|---|---|
| Feb. 1 | 12 | +35·8 | −1 31·3 | +3m 24·7 | −01·3s | +0m5 |

205

**Date** Tuesday February 1-2, 1938 H-L **Julian Day**

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2905 | HD 9270 | 01 26.1 | +14 50 | I-12 | Astro II | Set 010 | -9.0 | 18 06 | 18 13 | 1 |
| | " | " | " | " | " | " | | 18 14 | 18 18 | |
| 2906 | HD 25639f | 03 59.1 | +62 04 | " | " | " | -9.0 | 18 24 | 20 44 | 2 |
| | | | | | | | | | | |
| | | | 1938 Feb. 2-3 | Wed | Hd-L | cloudy | | | | |
| | | | 1938 Feb. 3-4, | Thursday, | H-NR; | cloudy. | | | | |

(2)

Thermostat very hard to set.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 14W | +15 01 | 1 | 4.50 | G-5 | 2-2 | setting 3 Light haze |
| | " | " | " | " | " | " | |
| | 1 10W | +62 10 | 2-4 | 7.09 | B | 1-1-1 | Heavy haze some of the start. Star lost most of the $18^{45}$ Stuck again. Closed at $2^{15}$ Synchronous drive very badly control pad |
| | | | | | | | Feb. 2 12 +37.4 -131.0 +30.0 +00.2 +0.5 |
| | | | | | | | Feb. 3 12 +38.8 -130.9 +37.1 -01.6 +0.5 |
| | | | | | | | Feb. 4 12 +40.1 -130.6 +43.0 -03.4 +0.4 |

207

Date Friday, Feb 4-5, 1937, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2907 | HD 14688 | 2 17.1 | 16 25 | I - 12 | ~~A to Z~~ | .010 | −1.4° | 18 14 | 19 34 | 1 | 50W | |
| 2908 | 35035 | 5 16.7 | 28 22 | – | – | – | −1.6 | 19 39 | 21 57 | 3 | 14W | |

1938 Feb-5-6, Saturday, Hd-MR, heavy rain & thick mist.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 1 | 50W +16 35 | 1 | 6.78 | A0 | 1-1-1 | quite hazy |
| | 1 | 14W +28 25 | 1 | 7.44 | A3 | 1-1-1 | E wind haze much thicker during last half of exposure finally image lost at end. |
| | | | | | | | became steadily thicker |
| | | | | | | | closed dome at 23.40 |
| | | | | | | | put on all heaters |
| | | | | | | | clouds the rest of the night |

| | ET | MC | SC | SW | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Feb. 5 | 10 | +41.2 | -130.8 | +43.4 | -01.8 | +0.4 |
| Feb. 7 | 12 | +43.6 | -130.8 | +53.2 | -04.6 | +0.4 |

209

Date Feb 7-8, 1938, Monday, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Set -1° Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2909 | HD 20458 | 3 12.4 | 13 29 | I-12 | A-F | .010 | 0° | 18 22 | 20 36 | 4 | |
| 2910 | 3.8817 | 5 43.4 | 43 59 | — | — | — | -0.7° | 20 41 | 22 49 | 1 | |
| 2911 | 55283 | 7 7.2 | 15 21 | — | — | — | -0.9 | 22 54 | 00 54 | 2 | |
| 2912 | 97889 | 11 10.5 | 60 28 | " | " | " | -0.8 | 01 03 | 02 23 | 3 | |
| 2913 | 112501 | 12 52.1 | 44 06 | " | " | " | -0.6 | 02 29 | 03 [illegible] | 4 | |
| 2914 | 126264 | 14 19.4 | 16 44 | " | " | " | -0.6 | 04 30 | 05 54 | 1 | |
| 2915 | 153286 | 16 53.4 | 47 32 | " | " | " | -0.6 | 06 00 | 06 50 | 2 | |

Tuesday February 8-9 H Cloudy.

Wed " 9-10 4da "

Thurs Feb 10 Hal MR Changed to I 25. #I-12 focus was 26.35 Tilt 19.45

2915F 7 ocus I-25 Extra II .010 -5.5 2

(1)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 14 W | 13 37 | 1–0 | 7.42 | A0 | 1-1-1 | moon shining through tube in large mirror |
| | 1 56 W | 43 59 | 1 | 7.51 | A2 | 1-1-1 | light clouds coming up from N at 22.05 |
| | 2 38 W | 15 15 | 1 | 7.39 | A0 | 1-1-1 | Light clouds over most of sky. Only one image seen. |
| | 0 03 W | 60 15 | 1 | 6.74 | A3 | 1-1-1 | trouble with clock, had to extend exp. |
| | 0 40 E | 43 52 | 1 | 6.95 | A0 | 1-1-1 | sky filling in at 3.10 star gone at 3.20 |
| | 0 26 E (X=1.) | 16 32 | 1 | 7.19 | A0 | 1-1-1 | clearing again. |
| | 1 10 E | 47 27 | 1 | 6.44 | A2p | 1-1-1 | |
| | | | | | | | Feb. 8 12 +44.8 −1 30.7 +58.0 −04.0 +0.4 |
| | | | | | | | Blower left on. |
| | | | | | | | Freezing p.m. — put on heaters d-n + m-n mirror. |
| | | | | | | | Feb. 9 12 +46.2 −1 30.2 +03.4 −05.3 +0.4 |
| | | | | | | | Feb. 10 12 +47.4 −1 29.8 Adv. 1m +17.2 −06.5 +0.4 |
| | | | | | | | 4 runs |
| Sun outside | | | | | 12/8 | | Set 1 23.3 Ave Set 23.25 |
| | | | | | | | 6 23.4 |
| | | | | | | | 9 23.5 |
| | | | | | | | 4 runs 23.2 corrected for backlash |

211

Date Thurs Feb 10-11/35 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 16 | HD 5394 | 00 50.7 | 60 " | J-25" | Process | 010 | -5.4 | 6.31 | 7 11 | 2 | |
| 29 17 | " 43947 | 06 13.9 | 16 02 | " | ~~Astra II~~ | ~~010~~ | | 7.11 | 7 27 | | |
| | | | | | | | | 7.27 | 7 35 | | |
| | | | | | | | | ~~7.46~~ | | | |
| 2917 | " 43947 | 06 17.9 | 16 ~~02~~ 03 | " | Astra II | 010 | -5.5° | 7.46 | 10 14 | 3 | |
| 2918 | " 56537 | 07 12.3 | 16 43 | " | " | " | -5.5 | 10 17 | 10.25 | 4 | |
| 2919 | " 68776 | 08 08.3 | 17 22 | " | | 010 M | -5.5 | 10.27 | 12 28 | 1 | |
| 2920 | " 91130 | 10 26.2 | 32 54 | " | " | " | -5.2 | 00 34 | 01 44 | 2 | |
| 29 21 | " 105388 | 12 03.0 | 31 37 | " | " | " | -5.4 | 01 49 | 02 25: | 3 | |
| | FOCUS | - | - | " | " | 010 | -9.5! | 08 10 | - | - | |
| | | Sat Feb 12 | | Hd-MR | | | | | | | |
| 2921 F | Focus | | | J-25" | Astra II | 010 | -9.0 | | | 4 | |

1938 Feb 12-13, Saturday, Hd-MR, heavy mist and rain

(6)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | 14° F REMARKS |
|---|---|---|---|---|---|---|---|
| 7 11 12 | | 60. 24 | 0 | 2 | Bop | 8, 8 | no filters Set 1 |
| 7 27 | | | | | | 8, 8 | " 5- } Shot to 7m Some cloudy |
| 7 35 | W 3 46 | | | | | 8 8 | " 9 } |
| | | | | | | | filters |
| | W 1h 02 | 16 02 | 0 | 7.09 | $G_0$ | 3, 3, 3 | Some clouds Moonlight on altitude |
| | W 15m | 16 39 | 1 | 3.71 | $A_2$ | 5, 5- | |
| | W 1h 22m | 13 12* | 1 | 7.48 | $K_0$ | 3, 3, 3 | * Checked field - OK. |
| | N 0 17 | 32 41 | 1-2 | 6.0? | B9 | 3, 3, 3 | Lyra & Cygnus |
| | E 0 34 | 31 24 | 1 | 7.24 | A0 | 3, 6 | with some 2 25. Clouds from then on. |
| | OUTSIDE | THROUGH | BASE | - | - | 12-12 | SLIDE: 23.16 TILT = 23.25 ~~no filter~~ |

| | | MC | SC | SW | MT | S.T. |
|---|---|---|---|---|---|---|
| Feb. 11 | 12 | +48.8 | -1m29s.4 | +19.8 | +0s.1 | (+26.6) +0m.4 |
| Feb. 12 | 10 | +49.9 | -1 29.0 | +25.6 | -0s.6 | +0m.4 |
| Feb. 14 | 15 | +52.6 | -1 28.1 | +40.7 | -03s.0 | +0m.4 |

Outside Thru Base — Focus 23.3 set 1 — 12/12
23.4 " 5
23.5- " 9

23.6 would be better

Focus not good

213

Date Monday Feb 14-15, 1938, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2922 | HD 84107 | 9 37.7 | 36 27 | I-25 | Astra II | 010 | −7°2 | 23 01 | 24 41 | 1 | |
| 2923 | 91636 | 10 29.8 | +09 10 | " | " | " | −7.2 | 00 48 | 02 18 | 2 | |
| 2924 | " | " | " | " | " | " | −7.2 | 02 18 | 03 38 | 3 | |
| 2925 | 133388 | 14 59.1 | +60 36 | " | " | " | −6.9 | 03 47 | 04 57 | 4 | |
| 2926 | 161569 | 17 41.2 | +45 05 | " | " | " | −7.0 | 05 04 | 06 44 | 1 | |
| | FOCUS | - | - | " | " | " | −7.2 | 06 50 | - | | |
| | | | Sunday Feb 15-16, 1938 H-L | | | | | | | | |
| 2926 F | Focus | | | I-25 | | 010 | −11.5 | 11 15 | | 1 | |

Set focus to 23.6

Cleared just before sunset but delayed opening because of very strong N-wind and light snow flurries blowing across from NW. Later, sky cloudless.



| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | +07°F | REMARKS |
|---|---|---|---|---|---|---|---|
| 24 - 1 | 0h 22m W | 30 13 | 0-0-0 | 5.79 | A2 | 2-2-2 | Clear fairly well at 21:40. Found some door lock frost. Should get by putting key with match in waste basket. Seeing terrible ← supp. list. |
| 02 12 - | 1 07 W | +08 56 | 0 | 5.7 | A0 | 2-2-2 | M's binary. Tried focussing, no good. moon in eyehead |
| 03 39 2 | 2 30 W | " | 0 | " | " | 2-2-2 | " ← (incorrectly numbered 2424) " |
| - 57 4 | 0 42 E | +60 26 | 1-2 | 5.95 | A2 | 2-2-2 | control clock heater would heat. |
| 5 44 | 1 30 E | +45 02 | 1 | 6.59 | B9 | 2-2-2 | generator pilot light is out! |
| - | OUTSIDE | THROUGH | BASE | - | - | 12-12 | SLIDE: 23.6, TILT: 23.63. "~~no focus~~" |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | slide | | Tilt | | no filter | |
| | Setting 2 | 23.60 | | 23.15 | | 12-10 | OUTSIDE THRU BASE |
| | 6 | 23.70 | | 23.15 | | | |
| | | | | | | | 23.60 & 23.62 best |
| | | | | | | | tilt OK. |
| | | | | | | | Feb 15 12 +53.8 -1 27.6 +47.8 +01.8 +0.5 |

215

Date Tuesday February 15-16, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2927 | HD 5394 | 00 50.7 | +60 11 | 1-25 | Process | 010 | -10.5 | 18 30 | 18 46 | 1 |
| 2928 | 21242 | 03 20.5 | +28 23 | " | Astra II | " | -10.8 | 18 52 | 20 52 | 2 |
| 2929 | 21242 | " | " | " | " | 010 M | -10.8 | 20 53 | 22 03 | 3 |
| | 63630 | 07 44.8 | +46 12 | " | " | | | | | 4 |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | No. Filters | REMARKS |
|---|---|---|---|---|---|---|---|
| 5 46 | 3 17 W | +60 22 | 0-1 | 2 | Bop | 10-10 | Great trouble setting thermostat. |
| 20 52 2 | 2 53 W | +28 29 | 0-1 | 7.29 | G5 | 1 filter 3-3-3 | |
| 22 03 3 | 4 04 W | +28 29 | 1-2 | 7.29 | G5 | 3-3-3 | Clouded over 21 56. Cleared 22 03. |
| 4 | | | | 6.61 | A3 | | |
| | | | | | | | Closed up 23 30 |

| | MTC | STC | SW | | |
|---|---|---|---|---|---|
| Feb 16 d 12 h | +55.4 | -1 27.0 | +54.1 | +04.0 s | +0.6 m |

217

Date Wed Feb 16-17, 1938 Hd - L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| - 2930 | S Tauri HD 37202 | 5h 31.7 | 21 05 | I-25 | Panchro | 010 | -5.0 | 10.45 | 11 21 | 3 | |
| | | | | | | | | 11 21 | 11 33 | | |
| - 2931 | " | " | " | " | Extra I | 010 | -4.8 | 11 34 | 11 35 | 4 | |
| | | | | | | | | 11 36 | 11 38 | | |
| | | | | | | | | 11 38 | 11 43 | | |
| 2932 | HD 75486 | 08h 42 | 62 20 | " | " | " | -4.9 | 11 48 | 12 40 | 1 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | 1938 February 17-18 | | Thursday | | Hd-MR | | heavy mist & rain | | | |
| | | 1938 February 18-19 | | Friday | | H-MR | | cloudy | | | |
| | | 1938 February 19 | | Saturday | | H-H | | see sheet for yg | | | |
| 2932F | [illegible] | | | I-12 | E-40 | 010 | -3.0 | | | 1 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2 3 | W 3h 15m | 21 07 | 2 | 3.0 | B3e | 2 filters 10, 10 | |
| | W 3h 27m | | 3 | | | 10, 10 | |
| | | | | | | 1 filter 9 | set 1 |
| | | | | | | 9 | " 5 |
| | W 3h 37m | | | | | 9 | " 9 |
| 11 [illegible] | W 1 21 | 62 12 | 3 | 6.00 | $F_0$ | 3, 3-3 | sky becoming generaly hazy. star gone at 12.40. cloud at 2 15 thick. telescope left on. |

| | | MC | S.C | S.W. | H.T.$_s$ | S.T.$_{MW}$ |
|---|---|---|---|---|---|---|
| Feb. 17 | 12 | +56.9 | −1 26.4 | +59.8 | +03.0 | +0.5 |
| Feb. 18 | 12 | +58.0 | −1 26.3 | +64.7 | +01.6 | +0.5 |
| 19 | 12 | +59.3 | −1 25.7 | +78.8 | +00.2 | +0.5 |

| | | clock | Tilt | | |
|---|---|---|---|---|---|
| started the 6.00 | setting 1 | 26.30 | 19.45 | 15/11 | |
| | 5 | 26.40 | | | |
| | 8 | 26.35 | | | |

Focus 26.20. NOT SET

219

Date 1938 February 19.20 Saturday, M-MK Julian Day

| Plate No. | Object HD | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| - 2933 | 133409 (5.6) | 15 01.9 (01.3) | +59 55 (+59 55) | I-12½ | Astra II | .010 | -02.2 | 02 43 | 04 17 | 2 | 1 04 E |
| 2934 | 157582 | 17 19.0 | +17 00 | " | " | " | -02.8 | 04 27 | 06 35 | 3 | 04 E |
| | FOCUS | - | - | " | " | " | -02.6 | 06 50 | - | " | |

(2)

Slowly clearing from midnight, with strong east wind.
Completely clear about 2. Opened up. 220

Set focus at 26.20

| Evening Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +21°F at 5h REMARKS |
|---|---|---|---|---|---|---|---|
| 24 12 | 1 04 E | +59 46 | 2 | 7.32 | A2 | 1-1-1 | windy ? |
| 24 13 | 1 04 E | +16 57 | 2-1 | 7.59 | A0 | 1-1-1 | ", Difficulty with upper curtain, chains & pulleys. O.K. now |
| | OUTSIDE | THROUGH | BASE | - | - | 2 fields 12-15 | who has the flashlight? 55 |
| | | | | | | | SLIDE = 26.20, TILT = 19.45. 58 |
| | | | | | | | East chain of upper curtain broke as curtain was being put back in place. |

221

Date 1938 Feb 20-21 Sunday Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2935 | HD 31069 | 04 42.7 | 43 54 | I-12 | Ilford II | 0.10 | -3.6 | 6 28 | 7 00 | 4 |
| 2936 | HD 35533 | 05 20.3 | 15 35 | " | " | " | -3.5 | 7 07 | 8 57 | 1 |
| 2937 | HD 60383 | 07 29.1 | 28 51 | " | " | " | -3.5 | 9 03 | 10 43 | 2 |
| 2938 | HD 79929 | 09 11.8 | 27 ~~42~~ 51 | " | " | " | -3.8 | 10 48 | 12 00 | 3 |
| 2939 | HD 92371 | 10 34.8 | 28 02 | " | " | " | -4.0 | 12 04 | 1 26 | 4 |
| 2940 | HD 99267 | 11 20.3 | 30 32 | " | " | " | -3.9 | 1 30 | 2 50 | 1 |
| 2941 | HD 120702 | 13 46.0 | 43 02 | " | " | " | -4.1 | 2 55 | 4 15 | 2 |
| 2942 | HD 131764 | 14 50.4 | 36 28 | " | " | " | -3.6 | 4 20 | 5 40 | 3 |
| 2943 | HD 145082 | 16 09.0 | 47 46 | " | " | " | -3.8 | 5 45 | 6 35 | 4 |

(9)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 [illegible] | 8m E | 43 67 | 4 | 5.96 | B9 | 1-1-1 | |
| [illegible] 871 | 1N 18m W | 15 37 | 3-2 | 7.48 | A0 | 1-1-1 | For Dr Heard. |
| [illegible] 49 2 | 56m W | 28 45 | 1-2 | 7.10 | A3 | 1-1-1 | " Dr Heard. Two other stars in field. |
| 2 [illegible] 3 | 30m W | 27 39 | 1-2 | 6.95 | F3 | 1-1-1 | |
| [illegible] | 0 34 W | 27 49 | 1-2 | 6.99 | A2 | 1-1-1 | |
| [illegible] | 1 13 W | 30 18 | 1 | 7.16 | F0 | 1-1-1 | |
| [illegible] | 0 12 W | 42 51 | 1 | 7.18 | F0 | 1-1-1 | |
| [illegible] | 0 33 W | 30 17 | 1 | 7.18 | F2 | 1-1-1 | |
| [illegible] 54 | 0 15 W | 47 40 | 1 | 6.58 | A0 | 1-1-1 | |

| | | MC | SC | SW | MT | ST |
|---|---|---|---|---|---|---|
| Feb. 21 | 12 | +61.8 | -1 24.9 | +20.1 Adv 1m | -01.6s | +05m |

Date Monday Feb 21-22, 1938 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2944 | HD 26039 | 4 23 | 16 16 | I-12 | Astra III | .010 | −2°9 | 18 36 | 20 12 | 1 | |
| 2945 | 47255 | 6 32.6 | 31 51 | — | — | — | −3·1 | 20 16 | 21 46 | 2 | |
| 2946 | 55283 | 7 7.2 | 15 21 | — | — | — | −2·9 | 21 52 | 23 34 | 3 | |
| 2947 | UV Leo | 10 1937 35.0 | 14 1937 35 | — | — | .014 M | −3·2 | 23 41 | 1 41 | 4 | |
| 2948 | HD 105262 | 12 02.1 | 13 33 | " | " | .010 | −2.7 | 1 47 | 2 47 | 1 | |
| 2949 | " 134305 | 15 04.0 | 12 52 | " | " | " | −2.6 | 2 58 | 4 25 | 2 | |
| 2950 | " 133909 | 15 01.9 | 59 55 | " | " | " | −2.7 | 4 37 | 6 17 | 3 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Transparency | REMARKS |
|---|---|---|---|---|---|---|---|
| [illegible] | 1 55W | 16 22 | 2 | 7.50 | B9 | 1-1-1 | |
| [illegible] | 0 54W | 31 53 | 2 | 7.31 | A0 | 1-1-1 | Setting circle Dec reading 4' too high |
| [illegible] | 2 13W | 15 15 | 2 | 7.39 | A0 | 1-1-1 | " " " " 4' " low Clear south, low south N early. |
| 14[illegible] | 0 55 W | 14 33 | 3 | 8.6 | G5 | 1-1-1 | light haze. |
| [illegible] | 0 31 W | 13 18 | 2-3 | 6.98 | B9 | 1-1-1 | Large thickening. |
| [illegible] | 0 49 E | 12 45 | 2-3 | 7.24 | A3 | 1-1-1 | clearing later |
| [illegible] | 1 03 W | 57 45 | 2-3 | 7.32 | A2 | 1-1-1 | more haze. |

| | | MC | SC | S.W. | HT | S.T. |
|---|---|---|---|---|---|---|
| Feb. 22 | 13 | +63°.4 | -1 26.4 | +22.4 | -00°.4 | +0m.4 |
| Feb. 23 | 12 | +64.4 | -1 24.1 | +31.3 | -01.4 | +0.4 |

225

Date Wed Feb 23-24, 1938 Hd- Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Thurs, 1938 February 24-25 | | | | MR | | | | |
| 2950F | Focus | – | – | I-12½ | Costa II | .010 | -2.5 | 4 15 | – 1 | OUTSIDE T |
| | | Slide 26.30 is best. | | | | Set it there as nearly as possible. | | | | T.T: 9.45 |

| Ending Time U.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | Opening at 7.00 found mirror badly frosted (no test) Put on all heat at 9.00 no improvement. ~~Put~~ directed radiant heater onto mirror which then cleared by 10.00. |
| - 1 | OUTSIDE | THROUGH | BASE | - | - | 2 fillets | |
| | TILT = 19.45 | SLIDE = | 26.20 | SETTING | 2 | 12-16 | Clouds at 10.00 |
| | | | 26.30 | | 5 | 12-15 | |
| | | | 26.25 | | 8 | 12-15 | |

| | | HC | SC. | SW | H.T. | S.T. |
|---|---|---|---|---|---|---|
| 4 Feb. 24 | 10 | +65° 5 | -1m 23s.8 | +38.8 | -02s.0 | +0m.4 |

227

Date Thursday February 24-25, 1938 11-M Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2951 | HD 76216 | 08h 49.7m | +58° 36' | I-12 | Agfa II | .10 | -4.0 | 23h 55m | 00h 55m | 1 |
| 2952 | 110834 | 12 39.8 | +44 39 | " | " | " | -5.0 | 03 16 | 04 31 | 2 |
| 2953 | 150203 | 16 34.4 | +43 ~~42~~ 46 | " | " | " | -5.0 | 04 39 | 06 27 | 3 |
| | FOCUS | - | - | " | " | " | -4.7 | 06 40 | - | " |

(3)

mostly cloudy with light snow early evening. Suddenly clears 22h 00m. Still some clouds remain at 23h 40m but mostly clear.

8°F at 6h 30m AM

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | comp. | REMARKS |
|---|---|---|---|---|---|---|---|
| | h m | ° ′ | | | | s | |
| | 2 01 W | +58 26 | 0-1 haze | 6.96 | A2 | ½, 3 | image practically gone 12h 30m →; closed dome 00h 55m; fair snow. |
| | 1 50 W | +44 26 | 0 | 6.76 | F5 | 1, 1, 1 | clearing again at 3h 00m. |
| | 0 08 E | +43 39 | 0-1 | 7.21 | A2 | 1, 1, 1 | slit dirty? |
| | OUTSIDE | THROUGH | BASE | - | - | 12-15 | SLIDE = 26.30 TILT = 19.45 SET 8 |
| | | | | | | | Put all the heat on |

| | | M.S. | S.S. | S.W. | M T | S.T. |
|---|---|---|---|---|---|---|
| | | ° | m | ° | s | m |
| Feb. 25 | 12 | +68.9 | −1 21.4 | +44.6 | +00.4 | +0.3 |

Date Friday, Feb 25-26, 1938 M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2954 | HD. 34547 | 5 13.2 | 13 29 | I-12 | Astra II | .010 | -6°4 | 18 41 | 20 41 | 1 | |
| 2955 | 43044 p | 6 9.0 | 14 38 | — | — | .010 M | -6.8 | 20 45 | 22 25 | 2 | |
| 2956 | 68903 | 8 9.4 | 16 23 | — | — | .010 L | -6.4 | 22 25 | 24 12 | 3 | |
| 2957 | 100808 | 11 31.0 | 28 20 | — | — | " | -6°0 | 00 18 | 00 40 | 4 | |
| 2958 | 105262 | 12 02.1 | 13 33 | — | — | " | -6.4 | 00 48 | 01 48 | 1 | |
| | FOCUS | — | — | — | — | " | -6.3 | 02 45 | — | " | |

Saturday, 1938 February 26-27, Hd-MR, cloudy with snow.

Sunday 1938 Feb 27-28 clear with very high wind and blowing snow - did not open dome —

(6)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | ±16° F at 3h | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | 1 29W | 13 29 | 1 | 7.5 | B9 | 1-1-1 | | |
| | 2 18W | 14 36 | 1 | (6.88) | B9 | 1-1-1 | double-tach preceding nonfocus at seeing was fair to good | |
| | 2 05W | 16 15 | 1 | 7.13 | B8 | 1-1-1 | light clouds in SW | |
| | 0 49E | 28 05 | 2 | 5.90 | A3 | 1-1-1 | | |
| | 0 11E | 13 20 | 3, hazy | 6.58 | B9 | 1-1-1 | sky generally hazy at start. Mag. gone at 1h 48m. | |
| | OUTSIDE | THROUGH | BASE | – | – | 2 filters 12-15 | SLIDE = 26.30, TILT = 19.45, SET. E. Snow | |
| | | | | | | | Put all the heat on. | |

| | | MC | SC | SW | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Feb. 26 | 10 | +67.8 | −1m 23.2s | +48.6 | +03.7s | +0.5m |
| Feb. 28 | 12 | +1m 10.2s | −1 23.2 | +63.0 | +00.3 | +0.5 |

231

Date Mon Feb 28 - Mar 1, 1937 Gd- Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2959 | HD17007 | 02 38.6 | 29 03 | I-12 | Cramer | 010 | -14.0 | 6 44 | 7 52 | 2 | 3h 26m | |
| 2960 | HD 46016 | 06 ~~25~~ 3 | 46 34 | " | " | " | -13.8 | 4 15 39 | | 3 | | |
| | | Tuesday March 1 | | | H-L | | Cloudy + snow + wet | | | | | |
| | | Wed Mar 2. | | | Clearing at 12.30 - 1.00 with | | | | | | | |
| | afraid to open. | | | | | | | | | | | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 52 | 3h 26M | 29 14 | 1 | 7.34 | F. | 1, 1, 1 | Comps. mounted. - Clouds all end 7.44 |
| | | | | 6.73 | Bg | 1, | Take star marked with arrow on map. Plane clock. |
| | | | | | | | ↖ please check anyway. |
| | | | | | | | Resumed Work. Cloud 11.40 |

| | | M C | S.C. | S.W | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 1 | 12 | +1 m 11.6 | -1 m 23.1 | +09.9 adv 1m | +02.3 | +0.4 |
| Mar. 2 | 12 | +1 12.9 | -1 23.0 | +16.2 | +00.7 | +0.5 |
| Mar. 3 | 12 | +1 14.2 | -1 22.9 | +22.1 | -01.0 | +0.5 |

a terrific N W. wind, now

Date Thursday March 3-4, 1938 HMR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2960 | HD 22195 | 03 29.4 | +31 21 | I-12 | Astro II | 0.0 | -14.8 | 18 50 | 20 40 | 4 |
| 2961 | 35239 | 05 18.2 | +31 03 | " | " | " | -15.0 | 20 44 | 21 17 | 1 |
| 2962 | 46031 | 06 25.9 | +15 58 | " | " | " | -14.2 | 21 24 | 22 [illegible] | 2 |
| 2963 | 63630 | 07 44.8 | +46 12 | " | " | " | -14.6 | 22 29 | 23 29 | 3 |
| 2964 | 76238 | 08 49.8 | +46 09 | " | " | " | -14.6 | 23 33 | 24 25 | 4 |
| | FOCUS | - | - | " | " | " | -14.5 | 01 09 | - | - |

Friday, 1938 March 4-5, Hd-MR, blizzard.
Saturday, 1938 March 5-6, M-MR, cloudy, with high wind.

Broke thermostat tube. Manual control of temperature.

234

-01° F at 11^00

+01° F at 5^30

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 3^36 W | +31 28 | 0 | 7.11 | F0 | 1-1-1 | light clouds. seeing a bit worse than last |
| | 2^26 W | +31 05 | 0-1 | 5.91 | B9 | 1-1-1 | |
| | 2^23 W | +15 58 | 0-1 | 6.51 | A5 | 1-1-1 | |
| | 2^09 W | +46 06 | 1 | 6.61 | A3 | 1-1-1 | |
| | 2^00 W | +46 01 | 1 | 7.21 | F2 F0 | 1-1-1 a little | clouds coming from south. star size 00^25 |
| | OUTSIDE | THROUGH | BASE | - | - | 12-15 | SLIDE = 26.30 TILT = 19.45 Set 8½ |
| | | | | | | | cloudy the rest of the night. cleared up 5^30 |

Temperature must be more closely controlled

| | | MC | SC | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 4 | 12 | +1^m 15^s.9 | -1 22.5 | +28.5 | +06^s.0 | +0^m.4 |
| Mar. 5 | 12 | + 02.6 | -1 22.7 | +33.3 | +05.0 | +0^m.6 |

Reset 0.2 added to pendulum

235

Date Sunday Mar 6-7 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2965 | HD 31069 | 04 47.7 | 43 54 | J-12 | Astra II | 010 | -3.5° | 7 08 | 7 40 | 1 | |
| 2966 | HD 60204 | 7 28.3 | 28 55 | " | " | | -3.1, -3.2 | 8 09 | 9 ~~19~~ 15 | 2 | |
| 2967 | HD 84005 | 9 37.0 | 30 35 | " | " | " | -3.2 | 11 05 | 12 25 | 3 | |
| 2968 | " 99276 67 | 11 20.5 | 30 32 | " | " | " | -3.3, 3.0 | 12 29 | 1 39 | 4 | |
| 2969 | " 120702 | 13 46.0 | 43 02 | " | " | " | -3.0, 3.2 | 1 44 | — | 1 | |
| | | Monday Mar 7-8, M-L | | | | | partially clear for few minutes | | | | |

computer

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp. | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 40 | 1h 28m W | 43 58 | 2 | 5.98 (6) | BQ | 1-1-1 | |
| 9 15 | 25m W | 18 51 | 2 | 7.52 (2) | G5 | 1-1-1 | For D. Heard clouds 9 15 clear again 10 45 |
| 12 18 | 25 W | 30 24 | 2 | 6.82 | A5 | 1-1-1 | |
| 1 39 | 0 56 W | 30 21 | 2 | 7.16 | Fo | 1-1-1 | |
| | - | 42 52 | 2 | 7.18 | Fo | 1-2 | light clouds 8 10 - 1 1 1 at 2 22<br>cloud at 4.00 thick, shower left on! |
| | | | | | | | Mar. 7 12 +06.2 -1 22.4 +35.9 +01.8s +0.4m |
| | at 8.45 | snow at 10.00. | | | | | |
| | | | | | | | Mar. 8 12 +07.6 -1 22.2 ±03.0 Reset +00.5s +0.4m |

237

Date Tuesday March 8-9, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | S.T. | | | | |
| ~2970 | H.D. 22195 | 03 29.4 | +31 21 | I-12 | Astro II | 010 | -2.8, -3.0 | 18 50 | 20 10 | 2 |
| 2971 | 28271 | 04 22.5 | +30 09 | " | " | " | -3.0, -2.7 | 20 13 | 21 13 | 3 |
| 2972 | 35984 | 05 23.4 | +29 07 | " | " | " | -2.8, -2.8 | 21 17 | 22 17 | 4 |
| 2973 | 47270 | 06 32.7 | -44 06 | " | " | " | -3.0, -2.6 | 22 21 | 23 31 | 1 |
| 2974 | 76216 | 08 49.7 | +58 36 | " | " | " | -2.4 | 23 37 | 01 07 | 2 |
| 2975 | 132445 | 14 54.1 | +44 52 | " | " | " | -4.0. | 02 50 | 04 50 | 3 |
| | 158485 | 17 24.5 | +58 44 | " | " | " | | | | 4 |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 3 25 W | +31 29 | 1-2-0 | 7.11 | F0 | 1-1-1 | Star broke very faint in via mag 6.8. Light Cloud a few min. |
| | 3 35 W | +30 14 | 0-1 | 6.68 | F6 | 1-1-1 | Light clouds |
| | 3 39 W | +29 10 | 1 | 6.66 | F5 | 1-1-1 | |
| | 3 43 W | +44 04 | 1-2 | 7.51 | K0 | 1-1-1 | near end falling in solid at 01.11 |
| | 3 02 W | +58 28 | 1-0 | 6.96 | A2 | 1-1-1 | Light clouds seeing unsteady light clouds partialy clear at 2.00. clear at 2.30. starting to snow lightly at 4.40. sky filling in from the north. Closed at 5.00 |
| | 0 43 W | +44 44 | 1-1 | 7.28 | A0 | 1-1-1 | |
| | | | | 6.58 | A2 | | |

Lower left corner

| | ME | SC | SW | MT. | ST |
|---|---|---|---|---|---|
| March 9 12 | +09.4 (0.5 added) | -1m 21.7s | -0.2 | +0.2s | +04m |

Date Wed Mar 9-10, 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2976 | HD 26911 | 04 10.1 | 15 09 | I-12 | Astra II | 010 | -3.8 -3.8 | 6 52 | 7 42 | 4 | |
| 2977 | " 27561 | 04 15.9 | 14 11 | " | " | " | -3.8 -3.4 | 7 45 | 8 39 | 1 | |
| 2978 | " 35238 | 05 18.2 | 31 ~~20~~ 08 | " | " | " | -3.4 -3.7 | 9 03 | 10 03 | 2 | |
| 2979 | " 45721 | 06 24.0 | 28 17 | " | " | " | -3.7 -3.5 | 10 16 | 11 30 | 3 | |
| 2980 | " 97938 | 11 10.8 | 13 09 | " | " | " | -3.4 -4.0 | 11 37 | 01 07 | 4 | |
| 2981 | " 105388 | 12 03.0 | 31 37 | " | " | " | -4.0, -3.5 | * 02 05 | 03 45 | 1 | |
| 2982 | " 121626 | 13 51.5 | 29 10 | " | " | " | -3.7, -4.0 | 03 48 | 05 18 | 2 | |
| 2983 | " 151741 | 17 20.0 | 15 43 | " | " | " | -3.7, -3.5 | 05 24 | 06 04 | 1 | |

* Dec gave out completely, an hour's struggle got it in running

(6)

| Ensing Time E.S.T. | Hour Angle End | Declination | | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 7h-4 | W 2h 20 | 15 | 14' | 2 — 1 | 6.77 | $F_5$ | 1, 1, 1 | |
| 8 59 1 | W 3h 31 | 14 | 15 | 2 | 6.99 | $F_0$ | 1, 1, 1 | almost limit W at this dec. |
| | W 3h 33 | 31 | 12 | 3 | 7.37 | $I5_0$ | 1, 1, 1 | ← Trouble with dec clamping |
| 1 30 3 | W 3h 55 | 28 | 17 | 3 | 6.91 | $A_2$ | 1, 1, 1 | Light clouds |
| | 0 45 W | 12 | 59 | 2 | 6.73 | $A_0$ | 1, 1-1 | More trouble with dec clamping. Used W unclamped. |
| 45 | 2 32 W | 31 | 22 | 1-2 | 7.24 | $A_0$ | 1-1-1 | |
| 3 | 2 17 W | 29 | 57 | 1 | 7.11 | $A_0$ | 1-1-1 | |
| | 0 21 E | 15 | 40 | 1 | 6.23 | $B_9$ | 1-1-1 | |

| | M.E. | S.C. | S.W. | H.I. | S.I. |
|---|---|---|---|---|---|
| | | | | S | N |
| Mar. 10 12 | +10.2 | -1 21.4 | +04.6 | +01.2 | +0.5 |

Code again.

Date Thurs Morn 10-11, 1938 H-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 2984 | 14D36756 | 05 28.7 | +4 15 | I-12 | Agfa Ft | 010 | +0.3 +0.3 | 9.16 | 10 56 3 | +4 20 |
| 2985 | " 46016 | 06 25.8 | 46 34 | " | " | " | +0.3 | 11 00 | 12 30 4 | +4 57 |
| 2986 | " 106926 | 12 12.7 | 15 42 | " | " | " | +0.5 | 00 38 | 01 30 1 | +0 11 |
| | FOCUS | — | — | " | " | " | +0.0 | 03 30 | — | — |

Friday, 1938 March 11-12, H-MR. Clear at midnight for ½ hour. Clear

Saturday, 1938 March 12-13, H-MR. Thin clouds all night

(3)

Thick Haze till about 9.00

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | +24°F at 5 AM | REMARKS |
|---|---|---|---|---|---|---|
| | W 4h 20m | 44 15 | 2 | 7.59 $F_5$ | 1,1,1. | Dec clamping not working. |
| | W 4 57 | 46 32 | 2 | 6.73 $B_8$ | 1,1,1. | Some clouds |
| | W 0 11 | 15 30 | 3 | 7.53 $K_0$ | 1,1,1 | clouds 01 30. images. |
| | OUTSIDE | THROUGH | BASE | - - | 2 plates 12–16 | SLIDE = 26.30 TILT = 19.45 |

closed up 5 00

| | | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 11 | 13 | +13.1 | -1m 21.1s | +11.9 | +03.2s | +0.5m |
| | | added 0.5 to M.C. pend. | | | | |

again about 5 A.M.

| | | | | | | |
|---|---|---|---|---|---|---|
| Mar 12 | 12 | +10.8 | -1 21.0 | +16.8 | +01.4s | +0.4m |

Date Sunday March 13-14 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2987 | HR 102589 | 11 43.5 | 29 21 | I 12 | Ortho | 0.10 | +2.4 | 11 34 | 01 24 | 2 | |
| 2988 | " 114723 | 13 07.3 | 32 39 | " | " | " | +2.4 | 01 30 | 03 10 | 3 | |
| 2989 | " 145082 | 16 04.0 | 47 46 | " | " | " | +2.2 | 03 20 | 04 40 | 4 | |
| 2990 | " 154713 | 17 02.0 | 43 57 | " | " | " | +2.2 | 04 44 | 05 55 | 1 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0 45 W | 29 07 | 0 | 7.11 | $A_2$ | 1-1-1 | Supplementary list. |
| | 1 09 W | 32 25 | 0 | 7.16 | F8 | 1-1-1 | " " |
| | 0 17 E | 47 40 | 0 | 6.58 | A0 | 1-1-1 | Seeing terrible !!! " " |
| | 0 00 | 43 53 | 0 | 6.36 | A0 | 1-1-1 | " " |

| | HC | SC | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|
| Mar. 14 | 12/+10 8/1 | 20.5 s | +26.5 | −02.8 s | +0.3 m |

245

Date Monday, Mar 14-15, 1938, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2991 | HD 35036 | 5 16·7 | 16 01 | I-12 | Astra II | .010 | -2.2 -2.3 | 19 00 | 20 50 | 2 | |
| 2992 | 55283 | 7 7·2 | 15 21 | " | " | " | -2.5 -1.7 | 21 23 | 23 13 | 3 | |
| 2993 | 97244 | 11 6·5 | 14 56 | " | " | " | -1.7 -2.0 | 23 19 | 00 09 | 4 | |
| 2994 | 110500 | 12 37.5 | 46 25 | " | " | " | -2.2 -2.0 | 00 15 | 01 40 | 1 | |
| 2995 | 133388 | 14 59.1 | 60 36 | " | " | " | -2.0 -1.8 | 01 47 | 02 22 | 2 | |
| 2996 | 133330 | 14 58.8 | 28 40 | " | " | " | -2.3, -2.0 | 02 28 | 03 48 | 3 | |
| 2997 | 163219 | 17 50.0 | 30 23 | " | " | " | -2.0, -1.5 | 03 53 | 05 53 | 4 | |

(1)

Aurora is north fairly bright (note added later)

| Ending Time P.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2·42 W | 16 04 | 1-2 | 7.38 | A0 | 1-1-1 | light clouds in south |
| | 3 15 W | 15 18 | 2-1 | 7.39 | A0 | 1-1-1 | Disc setting and guiding motions all dead. Found both fuses for motor gone. Replaced. |
| | 0 12 W | 14 44 | 1 | 6.43 | A5 | 1-1-1 | |
| | 0 12 W | 46 14 | 1 | 7.00 | A2 | 1-1-1 | Same Exit |
| | 1 27 E | 60 27 | 1 | 5.95 | A2 | 1-1-1 | Same Exit |
| | 0 01 E | 28 30 | 1 | 6 40 | A0 | 1-1-1 | |
| | 0 47 E | 30 24 | 1 | 7.54 | A3 | 1-1-1 | |

| | | HC | S.R. | SW | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 15 | 12 | +10.8 | -1m 20.2s | +33.3s | -01.8s | +0.4m |

Date Tuesday March 15-16, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2998 | HD 28271 | 04 22.5 | +30 09 | I-12 | A+ tr II | Slit 210 | -0.7, -0.4 | 19 02 | 19 47 | 1 | | |
| 2999 | 31662 | 04 52.6 | +60 56 | " | " | " | -0.4, -0.4 | 19 53 | 20 38 | 2 | | |
| 3000 | 46031 | 06 25.9 | +15 58 | " | " | " | -0.4, -0.3 | 20 43 | 22 13 | 3 | | |
| 3001 | 76216 | 08 49.7 | +58 36 | " | " | " | -0.3, | 22 17 | 0 27 | | | |

Wed. March 16-17/38 Hd Rain.

Thurs, 1938 March 17-18, M-MR, Heavy mist.

Friday, March 18-19, 1938 H-L Cloudy mist. Partly clearing toward morn.

Sat, 1938 March 19-20, Hd-MR, cloudy & misty.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 17[07] | 2[36] W | +30 14 | 2–3 | 6.68 | F5 | 1-1-1 | Light clouds. |
| [illegible] | 2[57] W | +60 59 | 2-3 | 6.54 | F5 | 1-1-1 | Very thick most of time |
| 22[19] | 2[59] W | +15 59 | 3-1 | 6.51 | A5 | 1-1-1 | Filling in some after start. Gleams 21[30]— |
| 3[17] | 2[60] W | +58 27 | 3 | 6.96 | A2 | 1-1-1 | Thick 22[35] Clears again 23[10]– 0[10] |

Clear at 200. solid
B low left on.

| | | MC | SC | MW | MT | ST |
|---|---|---|---|---|---|---|
| Mar. 16 | 12 | +10.9 | -1[m] 19.9[s] | +41.9 | -00.7[s] | ~~+27.1~~[m] +0.5 |
| Mar. 17 | 12 | +10.3 | -1 20.0 | +47.4 | -02.6[s] | +0.4[m] |
| Mar. 18 | 12 | +10.0 | -1 20.8 | +47.0 | -03.4[s] | +0.3[m] |

Date Sunday March 20-21 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3002 | HD 102589 | 11 43.5 | 29 21 | I 12 | Astra | 010 | +7.4 | 12 22 | 01 52 | 1 | |
| 3003 | HD 121626 | 13 51.5 | 29 10 | " | " | " | +7.5 +7.7 | 01 57 | 03 27 | 2 | |
| 3004 | HD 152877 | 16 51.0 | 28 17 | " | " | " | +7.9, +7.2 | 03 32 | 05 02 | 3 | |
| 3005 | HD 161695 | 17 41.9 | 31 33 | " | " | " | +7.5, 7.4 | 05 05 | 05 45 | 4 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Moon Mar 21 | | | Had Hg R. | | | | | | | |
| | I-12 Focus was 26.32 | | | | | Tilt 19.45 | | | | | |
| | Changed to I-25 | | | | | | | | | | |
| 3005 | Focus. | I-25 | | I-25 | Cutra 3 | 010 | +9.2 | | | 3 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 31 58 1 | X 42 W | 29 12 | 1 | 7.11 | $A_2$ | 1-1-1 | Note temp on high at 8.0 |
| 2 20 | 1 09 W | 28 58 | 1 | 7.11 | $A_0$ | 1-1-1 | For Dr Hd. |
| 0 | 0 15 E | 28 14 | 1 | 7.40 | F0 | 1-1-1 | " " " |
| 45 | 0 23 E | 31 32 | 1 | 6.23 | $B_9$ | 1-1-1 | |
| | | | | | | | M.E. S.E. S.W. M.T. E.T. |
| | | | | | | | 11 Nov. 21 12 +09.4 -1 19.2 +65.2 -08 4 +01 |
| 3 | Outside this base | | | | | 15/11. | Focus<br>Set 1 23.4 Tilt 23.15<br>2 23.5<br>9 23.6<br>best |

Date Monday March 21-22, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| - 3006 | HD 58715 | 07 21.7 | +08 29 | I-25 | E-33 | Set 010 | Set +12.5 | 19 06 | 19 10 | 3 | |
| | " | " | " | " | " | " | 12.7 | 19 10 | 19 26 | | |
| | " | " | " | | | | 13.7 | 19 26 | 19 42 | | |
| - 3007 | HD 58715 | " | " | " | " | | 13.8 | 19 43 | 19 59 | 4 | |
| | " | " | " | " | | | 13.5 | 19 59 | 20 15 | | |
| | " | " | " | | | | 13.3 | 20 15 | 20 31 | | |
| - 3008 | HD 58715 | " | " | " | " | | 13.0 | 20 32 | 20 48 | 3 | |
| | " | " | " | " | | | 13.0 | 20 48 | 21 04 | | |
| | " | " | " | " | | | 13.1 | 21 04 | 21 20 | | |
| - 3009 | HD 58715 | " | " | " | " | | 12.8 | 21 21 | 21 39 | 4 | |
| | " | " | " | " | | | 13.0 | 21 39 | 21 57 | | |
| | " | " | " | " | | | 13.0 | 21 58 | 22 23 | | |
| - 3010 | HD 58715 | " | " | " | " | | 13.2 | 22 24 | 22 46 | 3 | |
| | " | " | " | " | " | | 12.8 | 22 46 | 23 06 | | |
| | " | " | " | " | " | | 13.0 | 23 06 | 23 12 | | |
| 3011 | HD 98854 | 11 13.7 | +14 49 | " | Astra II | 010 | 12.5 R7 | 23 16 | 01 46 | 1 | |

Dome temp 52°F at start

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 0 36 E | +08 25 | 1 | 3.04 | B8 | 20[s] | Setting 1 | Start 10.0[s] |
| 0 20 E | | 1-2 | | | 10-10 | 6 | |
| 0 04 E | | | | | 10-10 | 9 | Running zero w/o oiling wire before shutting off. |
| 0 13 W | | 2 | 3.04 | B8 | 10-10 | Setting 1 | Shut off thermostat, left door open. |
| 0 29 W | | | | | 10-10 | 6 | |
| 0 45 W | | | | | 10-10 | 9 | |
| 1 02 W | | 2-1 | 3.04 | B8 | 10-10 | Setting 1 | Manual control to 130 |
| 1 18 W | | | | | 10-10 | 6 | |
| 1 35 W | | | | | 10-10 | 9 | |
| 1 53 W | | 2-1 | 3.04 | B8 | 10-10 | Setting 1 | |
| 2 11 W | | | | | 10-10 | 6 | |
| 2 37 W | | 1-0 | | | 10-10 | 9 | |
| 3 10 W | | 0 | 3.04 | B8 | 10-10 | Setting 1 | Oiling filling in from Manual |
| 3 21 W | | 0 | | | 10-10 | 6 | from 1.15 on. |
| 3 27 W | | 00 | | | 20 | 9 | |
| 2 09 W | +14 37 | 0 | 7.21 | G0 | 3-3-3 | ← | |

253

Date Monday, March 21-22, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3012 | HD 152951 | 16 51.5 | 46 41 | I-25 | Astra II | 0.10 | +12.7 - +12.3 | 02 42 | 04 42 | 2 | 3 E | -4 |
| 3013 | " 154494 | 17 00.7 | 12 63 | " | " | " | 12.7 | 04 46 | 05 06 | 3 | 0 17 E | |
| 3014 | " 161797 | 17 42.5 | 27 47 | " | " | " | 12.6 | 05 09 | 05 14 | 4 | 1 50 E | |
| | " | " | " | " | " | " | 12.6 | 05 14 | 05 22 | 4 | 42 E | |
| 3015 | " 163993 | 17 53.9 | 29 16 | " | " | " | 12.5 | 05 24 | 05 30 | 1 | 46 E | |
| | " | " | " | " | " | " | 12.5 | 05 30 | 05 40 | 1 | 36 E | |

Tues Mar 22/38 Hd MR.
changed to I-12

3015F Focus I-12 Astra II 010 +12.9 4

5.0 AM Centre blue not in. Mirror wet. left dome open and radiant heater in tube.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0 31 E | +46 38 | 0 | 6.77 | $A_2$ | 3-3-3 | Clearing again. light clouds |
| | 0 17 E | " 48 | 0 | 4.99 | $A_3$ | 3-3-3 | |
| | 0 50 E | +27 45 | 0 | 4.26 | $G_5$ | 4½-4½ | Setting 2½ |
| | 0 42 E | " | 0 | " | " | 4½-4½ | " 7½ |
| | 0 46 E | +29 15 | 0 | 4.82 | $K_0$ | 4½-4½ | Setting 2½ |
| | 0 36 E | " | 0 | " | " | 4½-4½ | " 7½ |

| | | MC | SC | SW | MT | ST |
|---|---|---|---|---|---|---|
| | | s | m s | s | s | m |
| Mar. 22 | 12 | +09.0 | -1 19.3 | +10.2 adv. 1m | -09.2 | +0.3 |

Outside the base 10/8

T.C.T. 19.45

| Set | 7 runs |
|---|---|
| 1 | 26.20 |
| 6 | 26.30 |
| 9 | 26.40 |

Best focus seems to be at 26.27

Date Tuesday, Mar 22-23, 1938 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | above Below | | | | |
| 3016 | HD 102056 | 11 39.6 | 29 13 | I-12 | astra II | .010 | +15.2° +18.1° | 23 11 | 00.50 | 2 | |
| | Wed Mar 23-24 | | | Hd-L | | | Rain | | | | |
| | Thurs Mar 24 | | | Hd-L | | | | | | | |
| Had camera lens out to fix Hartmann diaphragm (cut | | | | | | | | | | | |
| ~~Focus~~ 3016F | Focus test | | I-12 | astra I | | 010 | +1.0 | | | 2 | Extinct |

Put on additional heat in mirror cell about 18.30. Still had condensation.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | Mirror cleared about 22.20 but developed fanning because of heavy fog. Set camera to 26.27 Difficult to read after 27 temp. Seemed to have risen somewhat and wet wire again. Sky still fairly bad, especially marginal sky thickening up to 00.15 from then on star just faintly visible on slit. Shut at 02.50. |
| 2 | 0 51 W | 29 00 | 1 | 6.98 | A0 | 1-1-1 | |

| | CT | MC | SC | SW | MT | ST |
|---|---|---|---|---|---|---|
| Mar. 23 | 14 | +08.6 | -1 19.5 | +11.7 | -11.0 s | +0.2 m |
| Mar 24 | 12 | +08.2 | -1 19.4 | +17.6 | -12.0 | +0.1 |

(It was out of its "way")

2 Behind the bars 10/8

257

Date Thursday Mar 24-25, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature Above Below | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3017 | HD 44904 | 6 19.3 | 17 03 | I-12 | Astro II | .010 | +4°7 +8°5 | 19 17 | 21 13 | 1 | |
| 3018 | 98547 | 11 15.2 | 17 52 | — | — | — | +3°5 +7°3 +4.7 +8.8 | 22 19 | 24 09 | 3 | |
| 3019 | 105262 | 12 02.1 | 13 33 | — | — | — | +3.9 +7.9 | 00 14 | 00 30 | 4 | |
| | FOCUS | — | — | — | — | — | +4.1 +8.0 | 01 30 | — | — | |
| 3020 | 156341 | 17 11.9 | 16 47 | — | — | — | +2°7 +6°6 +3.1 +7.2 | 03 01 | 04 51 | 1 | |
| 3021 | 169820 | 18 21.4 | 14 55 | — | — | — | +3.0 +7.0 +3.3 +7.3 | 04 55 | 05 41 | 2 | |

Friday, 1938 Mar 25-26, M-MR clouds and rain

(5)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Used manual temp control | +36°F at 5 AM |
| 2 13 | 2 41 W | 17 02 | 1-0 | 6.80 | B9 | 1-1-1 | Cloudy coming in from SW at 20 h. Emergency light on clear at 21 h 05 m. Closed again at 21.10. | |
| | 0 42 W | 17 39 | 1 | 6.87 | A0 | 1-1-1 | Sky fairly clear. Images exceptionally fine. Thin again at 22 h 5. | |
| | 0 17 W | 13 18 | 1 | 6.98 | B9 | 1-2 | clouds in ext. Images 00 30. Thick. | 55 |
| | OUTSIDE | THROUGH | BASE | - | - | 2 filters 12-16 | SLIDE = 26.25 TILT = 19.45 | 58 |
| | 0 32 E | 16 44 | 1-2 | 7.5 | A0 | 1-1-1 | clearing about 2 40 some haze. | |
| | 0 51 E | 14 56 | 1-2 | 6.43 | B9 | 1-1-1 | thin clouds at dawn | |

| | MC | SC | SW | H.T. | S.T. |
|---|---|---|---|---|---|
| Mar. 25 12 | +08.3 | -1 19.1 | +24.9 | -10.2 s | +0.2 mv |

259

Date Saturday, March 26-27, 1938 H.M.P. Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3022 | HD 35239 | 05 18.2 | +31 03 | I-12 | Agfa II | set 010 | +0.6 +0.5 | 19 10 | 19 50 | 3 | | |
| ~~3023~~ | ~~35076~~ | 05 17.0 | +28 57 | " | " | " | | 19 54 | | ~~4~~ | | |
| 3023 | HD 76216 | 08 49.7 | +58 36 | " | " | " | +4.0 +3.5 | 21 33 | 23 03 | 1 | | |
| 3024 | 106677 | 12 11.0 | +73 07 | " | " | " | +4.0 | 23 09 | 24 29 | 2 | | |
| 3025 | 106022 | 12 06.9 | +29 06 | " | " | " | +3.5 +3.4 | 00 36 | 01 36 | 3 | | |
| 3026 | 112570 | 12 52.6 | +46 44 | " | " | " | +3.3 +3.0 | 01 42 | 02 42 | 4 | | |
| 3027 | 132445 | 14 54.1 | +44 52 | " | " | " | +3.3 +2.7 | 02 46 | 04 02 | 1 | | |
| 3028 | 159330 | 17 29.1 | +57 57 | " | " | " | +3.3 +2.9 | 04 08 | 05 38 | 2 | | |
| | FOCUS | - | - | " | " | " | +3.0 | 05 45 | - | - | | |

(1)

Cloudy all day; clearing with very light wind.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 2 26W | +31 05 | 0 | 5.91 | B9 | 1-1-1 | +32°F at 4.30 A.M. Heavy very bad due to wind. Light clouds |
| | | +28 51 | | 6.37 | I9 | 1 | clouded some of the stars |
| | 2 08W | +58 28 | 1-2 | 6.96 | A2 | 1-1-1 | |
| | 0 14W | +72 53 | 2 | 7.55 | K0 | 1-1-1 | |
| | 1 25W | +28 52 | 1-2 | 6.74 | F2 | 1-1-1 | — |
| | 1 46W | +46 30 | 2 | 7.22 | K0 | 1-1-1 | |
| | 1 05W | +44 42 | 2-3 | 7.28 | A2 | 1-1-1 | |
| | 0 07W | +57 54 | 3 | 7.57 | K2 | 1-1-1 | clouds 4 3 5 6 5 10. 55 |
| | OUTSIDE | THROUGH | BAND | — | - | 2 filters 12-16 | SLIDE = 26.25, TILT = 19.45. 58 |

Date Sunday March 27-28 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3029 | HD 57728 | 7 17.4 | 15 33 | I 12 | astia | 010 | -2.3 | 7 22 | 9 02 | | W |
| 3030 | HD 68461 | 8 07.4 | 16 49 | " | " | " | -0.6-1.1 | 9 07 | 10 17 | 3 | 1.09 W |
| 3031 | HD 105388 | 12 03.0 | 31 37 | " | " | " | -1.1- | 10 24 | 11 54 | 4 | 1.5 E |
| 3032 | HD 103676 | 11 51.2 | 27 15 | " | " | " | -1.2 | 12 00 | 01 20 | 1 | 1.2 W |
| 3033 | HD 120817 | 13 46.7 | 42 40 | " | " | " | -1.5 | 01 25 | 03 40 | 2 | 1.4 W |
| 3034 | HD 162668 | 17 47.1 | 30 01 | " | " | " | -1.5 | 03 47 | 04 52 | 3 | 1.1 E |
| 3035 | HD 161695 | 17 41.9 | 31 33 | " | " | " | -1.5 | 04 55 | 05 35 | 4 | 1 |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | Guiding | REMARKS |
|---|---|---|---|---|---|---|---|
| 3 01 | 1 44 W | 15 29 | 1 | 749 | G5 | 1-1-1 | For Dr Heard Temp! up to -1.5° - -0.6 |
| 0 [illegible] 3 | 2 09 W | 16 43 | 1 | 690 | G5 | 1-1-1 | |
| 11 [illegible] 4 | 8m E | 31 27 | 1 | 724 | A0 | 1-1-1 | For Dr Heard Temp very steady. |
| [illegible] 1 | 1 29 W | 27 00 | 1 | 721 | F2 | 1-1-1 | Sup Cur |
| [illegible] 1 | 1 54 W | 42 26 | 1 | 7.54 | A2 | 1-1-1 | Sup Cur |
| 0 [illegible] 2 | 0 54 E | 30 00 | 1 | 6.74 | A2 | 1-1-1 | |
| [illegible] 4 | 0 55 E | 31 31 | 1 | 6.23 | B9 | 1-1-1 | |

| | | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 28 | 12 | +07.7° | -1m19.0s | +41.0s | -08.5s | +0.3m |

263

Date Mar 28-29 Tuesday 1938 M-L Julian Day

Above +2.5 when Lowe opened +6.7 [illegible]

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature (clear / Lowe) | Starting Time E.S.T. (at 18.00) | Ending Time E.S.T. | Hour Angle End | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3036 | H.D 35522 | 5 20.2 | 15 23 | I-12 | dot-II | .010 | +3.5° +7.5° | 19 22 | 20 42 | 1 | |
| 3037 | 45180 | 6 20.9 | 15 35 | — | — | — | +4.0 +7.9 | 20 45 | 21 49 | 2 | |
| 3038 | UV Lowe | 10 35.0 (1937) | +14 35 (1937) | — | — | .015 M | +4.0 +7.8 | 21 56 | 23 56 | 3 | |
| 3039 | HD 124586 | 14 09.4 | 31 40 | " | " | .010 | +4.5 - +4.7 | 00 05 | 01 35 | 4 | |
| 3040 | " 133383 | 14 59.1 | 60 36 | " | " | " | +4.7 - +4.5 | 01 45 | 02 15 | 1 | |
| 3041 | " 157582 | 17 19.0 | 17 00 | " | " | " | +4.9 - +4.5 | 02 25 | 05 05 | 2 | |

(6)

Schmidt found far off focus.

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | 3 25 W | 15 23 | 2 | 7.02 | 89 | 1-1-1 | image showing lots of motion. |
| | 3 32 W | 15 33 | 1 | 6.69 | 89 | 1-1-1 | |
| | 1 27 W | 14 35 | 2 | 8.6 | G5 | 1-1-1 | |
| | 0 30 E | 31 28 | 2 | 7.25 | A0 | 1-1-1 | |
| | 0 39 E | 60 25 | 2 | 5.95 | A2 | 1-1-1 | light haze |
| | 0 09 E | 16 58 | 2 | 7.59 | A0 | 1-1-1 | haze, sky slowly filling up, clearing again remaining partially clear. |

| | C.T. | M.C. | S.C | S.W | H.T. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 29 | 12 | +07.5s | -1m 18.7s | +45.8 | -06.0s | +0.3m |

265

Date *Tuesday, March 29-30, 1938 H-L* Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | set | set. | | | | |
| 3042 | HD 106926 | 12 12.7 | +15 42 | I-12 | Astr. II | 010 | +2.2 - +2.0 | 23 20 | 00 40 | 3 | 35 W |
| 3043 | " 113021 | 12 55.7 | +32 18 | " | " | " | +2.0 - +2.5 | 00 43 | 02 33 | 4 | 4 W |
| 3044 | " 128660 | 14 33.1 | +43 16 | " | " | " | +2.4 - +2.0 | 02 36 | 03 56 | 1 | 35 W |
| 3045 | " 150203 | 16 34.4 | +43 46 | " | " | " | +2.5 - +2.2 | 03 59 | 0[illegible] 56 | 2 | [illegible] W |

Cloudy & rain all day. Partly clearing 23h-01m
started to open twice but was closed out.
Thinning out 22h40m

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | Changed focus to 26.30 |
| 0 35 W | +15 28 | 0-1 | 7.53 | K0 | 1-1-1 | |
| 1 46 W | +32 06 | 0-1 | 7.50 | G5 | 1-1-1 | hazy. Sup Fil's |
| 1 32 W | +43 05 | 0 | 7.20 | F8 | 1-1-1 | Sup Fil's |
| 0 42 W | +43 40 | 0 | 7.21 | A2 | 1-1-1 | sky hazing rds. thicks at 05.06 |

| | | M.C. | S.C | S.W | H.I. | S.T. |
|---|---|---|---|---|---|---|
| Mar. 30 | 12 | +07.0 | -1m 18.6s | +49.6s | -06.9s | +0m.3 |

267

Date Wed Mar 30-31 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3046 | HD 57049 | 07 ~~17.4~~ 14.5 | 15 ~~33~~ 21 | I·12 | Extra H | 010 | +8.5 8.5 | 8 40 | 9.20 | 3 | 1 12 1/2 |
| 3047 | " 116594 | 13 19.5 | 12 57 | " | " | " | 7.8 | 12 10 | 1 05 | 4 | 12 |
| | | | | Thurs Mar 31 Hd | | | | | | | |
| | | | | I·12 focus was 26.32 Tilt 19.45 - | | | | | | | |
| | | | | Changed to I-25' | | | | | | | |
| 3047F | Focus | | | I-25 I-12 | Extra I | 010 | 9.0 | | | 1 | Started |

At 5.00 found mirror wet (despite blower). Put all heat on. At 8.30 mirror and sky clear. Ohenial.



| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 30 3 | W 2 16 | 15 16 | 1 | 6.47 | $A_0$ | 1, 2 | Tinch at 9.10 |
| | | 12 45 | | 7.50 | $K_0$ | 1, | Later: Clearing occasionally for short intervals clouds from 12.45 on, sky thicken solid at 01.05 cloud up at 1.35. |
| | | | | | | | H.R. S.S. SW H.T. S.T. |
| | | | | | | | Mar 31 12 +06.6 -1 18.6 +53.4 -07.5 +0.2 |
| | Outside the bars | | | | | 15/1, | Focus<br>Set 1 23.3 Tilt 23.15<br>6 23.4<br>9 23.5<br>23.2 would be best |

269

Date Thurs. March 31 - April 1, 1938 HA-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3048 | HD 5394 | 00 50.7 | 60 11 | I-25 | Process | 010 | 7.0 | 7 17 | 7 41 | 1 | |
| | | | | | | | | 7 41 | 7 53 | | 1 7/16 |
| 3049 | HD 57049 | 07 14.5 | 15 21 | " | Astra II | 010 | 9.8, 12.0, 10.0 | 8 05 | 10 15 | 2 | 1 7/16 |
| 3049F | FOCUS | — | — | " | " | " | +3.8 | 5 20 | — | 1 | |
| | | | Friday April 1-2, 1938 | | | | | | | | |
| 3049 F2 | Focus | | | I-12 | Astra II | 010 | +0.0 | 3 45 | | | |
| | | | | | Focus on | | I-25 was 23.2 | | 24.2° | | |
| | | | Friday, 1938 April 1-2, H-MR, cloudy | | | | | | | | |

(5)

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 41 1 | | 60 25 | 1 | 2 | Bop | 8 8 (no filters) | Set 1 — Contain A small & indist. after midnight 7.15. |
| 7 53 | W 7½ 16 | | 1 | | | 8 8 | set 8 — Just a bit & limit 4½' — contain A quite much larger. |
| 8 15 2 | W 7½ 16 | 15 16 | 1 | 6.47 | $A_0$ | 3, 3 3 (1 filter) | Clouds most of time |
| = 11 | OUTSIDE | THROUGH | BASE | - | - | 24-32 (2 filters) | FOCUS = 23.20, TILT = 23.15 |
| | | | | | | ↓ | mountain 12-30 to 100, but clr. did over |
| | | | (These exposures give a good 25" focus plate; for 1 filter use 9-12) | | | | soon after. very high wind all night. heater: plug in south pier & also blower. |
| | | | | | | | Apr. 1 12 H.C. +05.0 S.C. -1 18.6 S.W. +57.2 M.T. -06.4 S.T. +0.2 |
| | | | | | | | setting — Slide — Tilt |
| | outside | through | base | | | 15, 12 | 1 — 26.20 — 19.45. |
| | | | | | | | 4 — 26.40 |
| | | | | | | | 9 — 26.30 |
| | | | | | | | Best focus 26.27 |
| | | | | | | | Apr. 2 10 H.C. +05.8 S.C. -1 18.4 S.W. +03.1 adv. M.T. -07.6 S.T. +0.2 |

271

Date Saturday Apr 2-3, ~~1937~~ 1938, M-MR Julian Day above Below

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3050 | HD. 103483 | 11 49.9 | 47 02 | I-12 | Astra II | .010 | -3.5° -3.5 | +0.8° +1.1 | 23 14 | 24 34 | 3 | 1 02 |
| | FOCUS | - | - | " | " | " | -5.3 | -0.8 | 5 20 | - | " | |

(1)

Cloudy for first part of evening
Cleared later

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +27°F at 5:30 AM REMARKS |
|---|---|---|---|---|---|---|---|
| | N 1 08 | 46 49 | 0 | 6.46 | A0 | 2 filters 1-1-1 | Windy, trouble - took precautions and tightened set focus to 26.27 stars |
| - | OUTSIDE | THROUGH | BASE | - | - | 12-16 | SLIDE = 26.27 TILT = 19.45 |
| | | | | | | | found 2 filters in. |
| | | | | | | | closed at 24 40, & stayed closed, with snow. |

| | H.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|
| April 5 | 12 | +05.2 | -1 17.9 | +16.3 | -10.0 +0.2 |

Date Tuesday, March 5-6, 1938 M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature above Below | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3051 | HD 38817 | 5 43.4 | 43 59 | I-12 | Astra II | .010 | -5°4 -0.6 | 19 32 | 22 00 | 2 | +5h4 | |
| 3052 | 100518 | 11 29.0 | 11 35 | — | — | — | -6.0 -1.2 | 22 10 | 23 32 | 4 | +3h1 | |
| 3053 | 103498 | 11 50.0 | 47 01 | " | " | " | -6.0--5.6 | 00 11 | 01 27 | 3 | +3h1 | |
| 3054 | 138406 | 15 26.8 | 62 05 | " | " | " | -6.2-5.9 | 01 34 | 03 14 | 4 | +5h1 | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2h 2 | 4 51 W | 44 00 | 1-0 | 7.51 | A2 | 1-1-1 | heavy clouds came up from NW at 20.30 clear again at 21.10 |
| 3 2 | 0 39 W | 11 21 | 1 | 6.52 | A2 | 1-1-1 | 22.04 watch stopped — reset after from telegram |
| 3 | 2 13 W | 46 48 | 0-1 | 6.79 | B9 | 1-1-1 | clouding up fast at 23.30 |
| 3 4 | 0 25 W | 61 55 | 0-1 | 6.79 | A0 | 1-1-1 | light haze; light clouds at 2.15. sky slowly thickening. sky mostly cloudy at 4.00 closed. |

| | | H.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Apr. 6 | 12 | +05.2 | -1 17.6 | +17.0 | -03$^{s}$.5 | +0$^{m}$.3 |

Date Wed Apr 6-7, 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3055 | HD 98388 | 11 14.0 | 13 56 | I-12 | Ilford Ilford 010 | | -5.5 | 10 13 | 12 03 | 1 | 1[20] W | 19 |
| 3056 | " 116594 | 13 19.5 | 12 57 | " | " | " | -5.7 - 5.3 | 12 07 | 01 57 | 2 | 1[m] W | 18 |
| 3057 | " 140612 | 15 39.5 | 46 04 | " | " | " | -4.9 - -5.0 | 02 01 | 03 11 | 3 | 1[12] W | 49 |
| 3058 | " 152896 | 16 51.1 | ~~28 17~~ 29 12 | " | " | " | -5.0 -5.3 | 03 15 | 05 00 | 4 | 1[50] W | 21 |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2 [illegible] 1 | 1 28 W | 13 43 | 2 | 7.58 | $F_8$ | 1,1,1 | |
| 31 [illegible] 2 | 1 17 W | 12 44 | 2 | 7.50 | $K_0$ | 1-1-1 | Sky hazy shortly after start. |
| 3 11 3 | 0 12 W | 45 57 | 2 | 7.18 | $F_0$ | 1-1-1 | |
| 3 [illegible] 4 | 0 50 W | 29 07 | 2 | 7.44 | $A_5$ | 1-1-1 | |

| | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|
| Apr. 7 12 | +05.1 | -1 17.4 | +22.3 | -04.°0 | +0.m2 |

Date Thursday Apr. 7-8, 1938, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature above Zero | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3059 | HD 44250 | 6 15.7 | 30 01 | I-12 | Astra II | .010 | -1.0° +3.3° | 19 32 | 22 24 | 1 | [illegible] |

Friday, 1938 Apr 8-9, blizzard all day, heavy clouds at night

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 2 X 51 W | 30 00 | 1 | 7.06 | A0 | 1-1-1 | thick mackerel sky coming up fast from W at 20.15. merged fully 20.24 Remained thick closed down at 21.00 hrs |
| | | | | | | Clouds the rest of the night |
| | | | | | | Apr 8. 12 +05.1 -1 17.1 +30.3 -04.8 +0.3 |
| | | | | | | 9 12 +04.8 -1 16.9 +35.3 -06.2 +0.3 |

279

Date Sat., April 9-10, 1938. Hal-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3060 | HD 82010 | 09 24.2 | 31 45 | I-12 | Eastman II | 010 | -2.5 | 8 53 | 10 53 | 2 | |
| 3061 | " 98318 | 11 14.0 | 13 ~~45~~ 56 | " | " | " | -2.7, -2.5 | 10 57 | 12 40 | 3 | |
| 3062 | " 145891 | 16 08.3 | 13 04 | " | " | " | -2.8, -2.5 | 00 46 | 02 00 | 4 | |
| 3063 | " 152877 | 16 51.0 | 28 17 | " | " | " | -2.8, -2.5 | 02 04 | 03 36 | 1 | |
| 3064 | " 154974 | 17 03.7 | 16 13 | " | " | " | -2.5, -2.0 | 03 39 | 05 06 | 2 | |
| | FOCUS | — | — | " | " | " | -2.5 | 05 10 | — | | |

(5)

Clouds lifting from W at 8:30

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +27°F at 4 A.M. REMARKS | |
|---|---|---|---|---|---|---|---|---|
| [illegible] | W 2 20 | 31 35 | 2 | 7.55 | B8 | 1, 1, 1 | | |
| [illegible] | W 2 17 | 13 43 | 1 | 7.58 | F8 | 1, 1, 1 | | |
| [illegible] | E 1 17 | 12 57 | 2 | 7.04 | A3 | 1, 1, 1 | | |
| [illegible] | E 0 23 | 28 13 | 2 | 7.40 | F0 | 1, 1, 1 | | |
| [illegible] | W 0 55 | 16 09 | 2-1 | 7.17 | F8 | 1, 1, 1. | | S=3 |
| - | OUTSIDE | THROUGH | BASE | - | - | 8-10 | SLIDE = 26.30 TILT = 19.45 | S=6 |

Date April 10-11 Y-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3065 | HD 9[illegible]18 | 10 46.7 | 46 20 | I-12 | astra II | 010 | -2.1 -2.0 | 9 17 | 10 47 | 3 | | |
| 3066 | HD 112501 | 12 52.1 | 44 06 | " | " | " | -1.9 -1.7 | 10 58 | 12 08 | 4 | | |
| 3067 | HD 131764 | 14 50.4 | 30 28 | " | " | " | -1.9, -1.6 | 12 14 | 01 24 | 1 | | |
| 3068 | HD 156653 | 17 13.7 | 17 26 | " | " | " | -1.8, -2.0 | 01 32 | 02 12 | 2 | | |
| 3069 | HD 162668 | 17 47.1 | 30 01 | " | " | " | -2.0 -1.5 | 02 19 | 03 22 | 3 | | |
| 3070 | HD 165908 | 18 03.2 | 30 33 | " | " | " | -1.5 | 03 25 | 03 45 | 4 | | |
| 3071 | HD 166709 | 18 05.4 | 44 06 | " | " | " | -1.5 | 03 54 | 04 50 | V | | |

Clear all day clouded over at sunset - then cleared

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | Comp. | REMARKS |
|---|---|---|---|---|---|---|
| 5 3 W | 46 06 | 1 | 7.07 | $A_2$ | 1-1-1 | For Dr Millman |
| 0 11 W | 43 52 | 2 | 6.95 | $A_0$ | 1-1-1 | " |
| 0 31 E | 30 17 | 1-2 | 7.18 | $F_2$ | 1-1-1 | |
| 2 06 E | 17 22 | 1-2 | 5.90 | $A_0$ | 1-1-1 | light clouds |
| 1 29 E | 30 00 | 2 | 6.74 | $A_2$ | 1-1-1 | scattered cloud |
| 1 22 E | 30 33 | 3 | 5.71 | $F_8$ | 1-1-1 | |
| 0 18 E | 44 05 | 3-2 | 7.06 | $F_5$ | 1-1-1 | |

Date Monday Apr 11-12, 1938, M-L Julian Day

Above Below

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3072 | HD 47255 | 6 32.6 | 31 51 | I-12 | Astra II | .010 | +5°.0 +9°.1 | 19 40 | 20 28 | 2 | 2 54 W |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 2 | 54 W | 31 48 | 1 | 7.31 | A0 | 1-1 | light clouds over most of sky. getting thicker, image faint at 19.55 Image gone at 20.26 |
| | | | | | | | still thick at 21h closed down |

| | | MC | SC | JW | HT | ST |
|---|---|---|---|---|---|---|
| Apr. 12 | 12 | +04.0 | -116.5 | +48.5 | $-08^{s}.0$ | $+0^{m}.3$ |

285

Date Tuesday April 12-13, 1938 H-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3073 | HD 73797 | 08 35.1 | +73 39 | I-12 | Ac. II | 010 | +7.3 +7.0 | 19 35 | 21 55 | 1 |
| 3074 | 213126 | 22 24.2 | +87 34 | " | " | " | +7.3 | 22 00 | 00 45 | 2 |
| 3075 | 148432 | 16 ~~21.8~~ 21.0 | +76 22 | " | " | " | +5 5·6.0 | 01 54 | 03 54 | 3 |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 2 20 W | +73 32 | 1 | 7.46 | $A_2$ | 1-1-1 | Telescope E of pier. 50 Uv off then again. Light clouds |
| | (+92 16) | 1 | 7.43 | $A_2$ | 1-1-1 | clouds $22^{40}-23^{30}$ (star gone). Thin haze. sky |
| 0 38 W | +76 18 | 1 | 6.98 | $A_3$ | 1-1-1 | thickening, very thick at 00.45. Clearing off again later and remaining partly clear. |

| | | M.C. | S.C. | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|---|
| Apr. 13 | 12 | +04·0 | -1161 | +51·9 | -09·0 | +0.2 |

Date Wed April 13-14, 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3076 | HD60383 | 07 29.1 | 28 51 | I-12 | Astra II | 010 | +9.4 +9.8 | 7.35 | 9 05 | 4 | 1 42 |
| 3077 | " 73080 | 08 31.3 | 28 39 | " | " | " | 10.0 | 9.08 | 10 38 | 1 | 1 13 |
| 3078 | " 100972 | 11 32.2 | 45 17 | " | Astra VIII | 015M | 9.8 | 10 44 | 01 00 | 3 | |
| 3079 | " 140612 | 15 39.5 | 46 04 | " | Astra II | 010 | +9.5 | 01 07 | 03 07 | 4 | |
| | | Thurs, 1938 April 14-15, Hd-MR | | | | | cloudy | | | | |

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| 7 05 4 | W 2h 42 | 28 45 | 4 | 7.10 | A3 | 1, 1, 1 | Hazy |
| [illegible] | W 3h 13 | 29 - 30 | 3 | 7.50 | G5 | 1, 1, 1 | Increasing haze |
| [illegible] 3 | 2 34 W | 45 02 | 3 | 6.56 | B9 | 4, 4, 4 | 4 to star. Spots 2m. haze, light clouds. |
| - | 0 36 W | 45 56 | 3 | ~~6.90~~ 7.18 | F0 | 1-1-1 | haze. clouds. sky slowly thickening. |

| | | M.C. | S.C | S.W. | M.T. s | S.T. m |
|---|---|---|---|---|---|---|
| Upper 14 | 12 | +03·9 | -1 15·9 | +58·5 | -11·0 | +0·2 |

Date Friday, Apr. 15-16, 1938, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature (above / below) | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End |
|---|---|---|---|---|---|---|---|---|---|---|
| 3080 | H.D. 102056 | 11 39.6 | 29 ~~02~~ 13 | 1-12 | Astrau | .010 | +8°.8 +12°.7 | 22h 44m | 24h 44m 1 | |
| 3081 | 124586 | 14 09.4 | 31 40 | " | " | " | +8°.7 +12°.7 | 00 51 | 02 51 2 | |
| 082 | 168481 | 18 ~~14.4~~ 14.3 | 15 ~~48~~ 47 | " | " | " | +8°.4 +12°.4 | 03 04 | 04 40 3 | |
| | FOCUS | — | — | " | " | " | +8°.2 +12°.0 | 04 50 | — | — |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | Saturday, | 1938 April 16-17 | | H-MR | | clear all day. Mountain | | | | |
| | | | | | | dark till midnight, when it clouded | | | | |
| | | | | | | for about half an hour. Some clouds remain later | | | | |
| | Sunday | April 17-18 | | showers at | | 11.15 p.m. sky partly clear | | | | |
| | | | | | | later but black again at 1 a.m. | | | | |
| | Monday | April 18-19 | | Mostly cloudy with showers. | | Fair clear for about | | | | |
| (3) | | | | Tues. early midnight clouds clear later | | | | | | |

Cloudy all afternoon and first part of evening
Cleared very badly. At 22.35, SE quarter of sky
still covered by cloud

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | 4.30 A.M., +44° F REMARKS |
|---|---|---|---|---|---|---|
| W 2h 19m | 28 57 | 0 | 6.98 | A0 | 1-1-1 | Sup. fair |
| W 1 57 | 31 29 | 1 | 7.25 | A0 | 1-1-1 | Sup. fair Very good aurora. Extensive patches of |
| E 0 19 | 15 47 | 2 | 7.08 | A3 | 1-1-1 | brilliant red. At times the streamers covered almost |
| OUTSIDE | THROUGH | BASE | - | - | 6-8 | the entire sky, extending well south of the equator. |
| SLIDE = | 26.30 | TILT = 19.5 | | | | |

| | C.T. | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| Apr. 19 | 12 | +01.7 | -1m 17.3s | -45.8s Reset | -01.3s Reset. | -0.6m |

Tuesday Apr. 19-20, 1926 M+ Stars occasionally showing faintly after 8.30 p.m. Very high wind.

| | | | | | | |
|---|---|---|---|---|---|---|
| Apr. 20 | 12 | +01.0 | -1 17.4 | -42.6 | -03.7s | -0.4m |

Date Wed April 20-21, 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3083 | HD 68776 | 68 08.8 | 13 22 | I·12 | Extra II | 010 | +10.2 | 7 48 | 9 26 | 4 | |
| 3084 | " 105388 | 12 03.0 | 31 37 | " | " | " | 7.6(4) 9.2 | 9 30 | 11 02 | 1 | |
| 3085 | " 106926 | 12 12.7 | 15 42 | " | " | " | 9.5 + 10.0 | 11 05 | 01 00 | 2 | |
| 3086 | " 145891 | 16 08.3 | 13 04 | " | " | " | 9.5 + 9.8 | 01 05 | 02 45 | 4 | |
| 3087 | " 158251 | 17 23.1 | 16 32 | " | " | " | 9.3 - 9.8 | 02 50 | 04 40 | 3 | |

Thurs, 1938 April 21-22, Hd-MR, Clouds and rain

Mirror Silvered Friday afternoon 22-23 no observing

Saturday, April 23-24 1938, M-MR Cloudy at

| Ending Time E.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | |
|---|---|---|---|---|---|---|
| | W 2h 51m | 13 15 | 0 | 7.48 | $K_0$ | 1, 1, 1 |
| | W 34m | 31 22 | 0 | 7.24 | $A_0$ | 1, 1, 1 |
| | 2h 22m W | 15 28 | 0 | 7.53 | $K_0$ | 1, 1, 1 |
| | 0h 12m W | 12 56 | 0 | 7.04 | $A_3$ | 1-1-1 |
| | 0h 53m W | 16 28 | 0 | 7.44 | $F_0$ | 1-1-1 |

REMARKS

| | C.T. | M.C | S.C. | S.W. | MI. S.T. |
|---|---|---|---|---|---|
| | | s | m s | s | s m |
| Apr. 21 | 12 | +00·5 | -1 17·5 | -41·7 | -05·2 -0·4 |
| Apr. 22 | 12 | +00·2 | -1 18·6 | -41·1 | -07·6 -0·5 |
| Apr. 23 | 10 | +00·1 | -1 17·5 | -37·7 | -09·4 -05 |

Sunset. Star later visible through haze. 2 to 3 mags. lost a little clearer at 10 00 but hazy clouds came up from W about 11 same thing again at 12 00, continued cloudy. 4.00 : first telescope down & blower in.

Mean S. T.

293

Date Monday, Aug 25-26 1938, M-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature Above | Temperature Below | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3087 $F_1$ | | | | I-12 | Ansco I | .014 | 10.0° | 14.0° | | | 1 |
| | | 1937 | 1937 | | | | | | | | |
| -3088 | UV Leonis | 10 33.4m 10 35.0 | 14 47.1m 14 35 | — | — | .014½ | 10.0° | 14.0° | 20 18 | 22 18 | 2 |
| 3089 | HD 108714 | 12 24.3 | 17 53 | — | — | .010 | 10.0 | 14.1 | 22 22 | 00 12 | 3 |
| 3090 | " 136831 | 15 17.7 | 12 56 | " | " | " | 10.0 | 14.0 | 00 17 | 01 07 | 4 |
| 3091 | " 169169 | 18 18.3 | 14 57 | " | " | " | 10.0 | 14.1 | 01 13 | 03 13 | 1 |
| 3092 | " 169247 | 18 18.7 | 14 39 | " | " | " | 10.4 | 14.4 | 03 16 | 04 " | 2 |

| Ending Time P.S.T. | Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | focus at 26.30 | | | | 9 6 | Apr. 25 10 M.C. -01.0 S.C. -1m 17.2s S.W. -35.4 M.T. -12.6s S.T. -0.6m |
| | | seeing varied rapidly last night | | | | | focus too long — changed to 26.27 |
| | 1 39 W | 14 34 | 1 | 8.6 | G5 | 1-1-1 | Tried to use cent. clock but something is wrong with the right hand bearing of right hour circle. The pointer turning freely and when magnetic clamp goes on it is a little chattering. Should not be used till fixed!!! |
| | 1 42 W | 17 38 | 1 | 7.52 | A0 | 1-1-1 | |
| | 0 16 E | 12 46 | 0-1 | 6.20 | A2 | 1-1-1 | |
| | 1 10 E | 14 58 | 0-1 | 7.40 | A2 | 1-1-1 | |
| | 0 [illegible] W | 14 38 | 1 | 6.67 | B9 | 1-1-1 | light clouds to west end |
| | | | | | | | Control fixed already AM F.S.H. (last night) |
| | | | | | | | Apr 26 10 -00.4s -1m 16.8s -31.1s -13.4s -0.6m |

**Date** Tuesday April 26-27, 1938 H-L **Julian Day**

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3093 | HD 110834 | 12 39.8 | +44 39 | I-12 | Ast. II | 010 | +12.5 12.3 | 22 55 | 23 16 3 | | |
| 3094 | " 132445 | 15 54.1 | +44 52 | " | " | " | +12.3 14.5 | 23 51 | 0 21 4 | | |
| 3095 | " 150203 | 16 34.4 | +43 46 | " | " | " | +13.0 13.5 | 01 29 | 01 59 2 | | |
| 3096 | " 168485 | 17 24.5 | +58 44 | " | " | " | +13.0 12.7 | 03 08 | 03 43 3 | | |
| 3097 | " 162986 | 17 43.5 | +32 32 | " | " | " | +12.9 12.5 | 03 46 | 04 40 4 | | |

Cloudy early evening. Clearing briefly 25h 46m Pm
Humph. Then clearing again 22h 30m. 296

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 04 W | +44 26 | 0 | 6.76 | F5 | 1-1-1 | Partly cloudy at start. |
| 0 26 W | +44 42 | 0 | 7.28 | A2 | 1-1-1 | |
| N 24 W | +43 40 | 0 | 7.21 | A2 | 1-1-1 | |
| 0 15 N | -53 +2 | 0-1 | 6.53 | A2 | 1-1-1 | Marked flyers. |
| 0 21 W | +32 00 | 0-1 | 7.04 | A0 | 1-1-1 | |

| | | M.C. | S.C. | S.W. | M.T. | S.T. |
|---|---|---|---|---|---|---|
| | | s | m s | s | s | m |
| Apr. 27 | 10 | -01.7 | -1 17.7 | -28.5 | -14.6 | -0.6 |

Date Wed April 27-28, 1938 Hd-L Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3098 | HD 116594 | 13 19.5 | 12 57 | I-12 | Astra II | 010 | 18.2 | 10 26 | 12 30 | 1 |
| 3099 | 140612 | 15 34.5 | 46 04 | " | " | " | +17.0, +17.5 | 1 30 | 3 00 | 2 |
| | ~~154974~~ | ~~17 03.7~~ | ~~16 13~~ | " | " | " | ~~+17.2, +18.0~~ | 3 05 | ~~4 35~~ | 3 |
| 3099F | Focus Test | | | | | | | | | |
| | | | Thurs Apr 28 | | | Hd | | | | |
| 3099F2 | Focus | | | I-12 | Astra II | 010 | 16.2 | | | 2 |
| | | | | | | Hd-H | | | | |
| 3099 F3 | Platefolder Test | | | I-12 | Astra II | 010 | 17 | | | 1 |
| 3099 F4 | Platefolder Test | | | | | | | | | 2 |
| | Slit-head Test | | | | | | | | | 2 |
| 3099 F5 | Platefolder Test | | | | | | | | | 3 |
| 3099 F6 | " " | | | | | | | | | 4 |

Sky partly clear at intervals from 9.20.



| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | REMARKS |
|---|---|---|---|---|---|---|
| 1 13 W | 12 43 | 1 | 7.50 | Fo | 1,,1 | haze, clouds at 11.45 – sky remaining thick |
| 1 24 W | 45 57 | 1 | 7.18 | Fo | 1-1-1 | until 1.15 then clearing. (overexposed) |
| ~~1 35 W~~ | ~~16 09~~ | ~~1~~ | ~~7.11~~ | ~~Fo~~ | ~~1-1-1~~ | setting 2½ after exposing discovered slide |
| outside through base | | | | | 6-8 | setting 7½ was not drawn, result nil. |
| | | | | | | Focus poor. |
| Outside thro base | | | | | 6.6 | Set 1 from 26.3 |
| | | | | | | Set 6 26.2 } about 26.27 |
| | | | | | | set 9 26.1 |
| outside thro base | | | | | 6/6 | Settings 3 and 7 From 26.27 |
| " " " | | | | | 6/6 | " 1 " 26.27 |
| 2x Hartmann Diaphragm | | | | | 6/6 | " 5 short → long<br>7 long → short " 26.27<br>9 short → long |
| outside thro base | | | | | 6/6 | Settings 3 and 7 From 26.27 |
| " " " | | | | | 6/6 | " 3 " 7 " 26.27 |

Date Thursday, Apl 28-29 1938, M-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | Hour Angle End | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | rain and thunder storms all evening, | | | | | | | |
| | | | | heavy clouds & lt. Poor ff 1-4 A.M. | | | | | | | |
| | | Friday, 1938 | Apl 29-30, | H-MK. | | | shows and heavy clouds | | | | |

| Hour Angle End | Declination | Seeing | Ptg. Mag. | | REMARKS |
|---|---|---|---|---|---|
| | | | | | H.C. S.C S.W H.T. S.T. |
| | | | | | Apr. 28 10 -02.5 -1 15.5 -23.8 -16.2 s 0.6 m |
| | | | | | Apr. 30 10 -02.1 -1 16.4 -17.8 -19.6 s (-0.1 m) |
| | | | | | Sat night N.B. I make this correction -1.m0 - Hd |
| | | | | | May 1 -20.0 s -0.7 m |

Date Sat April 30 - May 1, 1938 Hd-MR Julian Day

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. | |
|---|---|---|---|---|---|---|---|---|---|---|
| ~~3100~~ | ~~H.D. 105388~~ | ~~12 03.10~~ | ~~31 37~~ | ~~I - 12½~~ | ~~Ortho II~~ | ~~010~~ | ~~+4.5~~ | 9 24 | | 1 |
| 3100 | H.D. 158251 | 17h 23.1m | 16° 32' | I - 12½ | Ortho II | 010 | +03.2 | 2h 55m | 4h 32m | 2 |
| | FOCUS | - | - | " | " | " | +02.9 | 4 35 | - | |

Clouds all day. Clearing about 9.00



| Hour Angle End | Declination | Seeing | Ptg. Mag. | | | +31°F at 4 AM REMARKS |
|---|---|---|---|---|---|---|
| | | | 7.24 | $A_0$ | 1 | "clouded immediately after start" |
| N 1h 24m | +16° 30' | 1 (var) | 7.44 | F0 | 1, 1, 1 | - clearing slowly from 2 AM on |
| TSIDE | THROUGH | BASE | - | - | 4½-6 | - difficulty with driving gear for RA quick motion; |
| LIDE = | 26.27 | TILT: 19.5 | | | | was sticking at first, but seemed to limber up OK. |
| | | | | | | used some oil. still sticking occasionally |

| | | M.C. | S.C | S.W. | H.T. | S.T. |
|---|---|---|---|---|---|---|
| May 2 | 10 | -03.0 | -1m 16.5s | -13.2 | -21.2s | -0.7m |

Date..... Julian Day.....

| Plate No. | Object | R.A. 1900 | Declination 1900 | Instrument | Emulsion | Slit | Temperature | Starting Time E.S.T. | Ending Time E.S.T. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
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| Time | Ending Time E.S.T. |
| --- | --- |
| | |
| | |
| |

Analysis of Types of stars on Program Dec 26/37

B - B5 IIII
$B_{8-9}$ IIII IIII IIII IIII IIII
A IIII IIII IIII IIII IIII IIII IIII
F IIII IIII IIII IIII IIII IIII
G IIII IIII IIII III
K IIII IIII III
M I